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JOHANN CHRISTOPH SPURZHEIM AND THE RISE AND FALL OF SCIENTIFIC PHRENOLOGYIN BOSTON, 1832-1842

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IN BOSTON, 1832-1842

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TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

Chart

ABSTRACT

JOHANN CHRISTOPH SPURZHEIM
AND THE RISE AND FALL OF SCIENTIFIC PHRENOLOGY
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This investigation presents an account of an heretofore little understood--but important--series of events relating to the history of the behavioral sciences. The main focus of the research is the rise of "scientific phrenology" in Boston, Massachusetts during the decade 1832-1842 including special reference to Johann Christoph Spurzheim (1776-1832)--who provided the impetous for the organization of that movement--and the antecedent and contemporary conditions which were also contributory.

To make more meaningful and to place in proper historical perspective the events in Boston which are ultimately explored, the history of man's very early attempts to explain the nature of mind and brain are first described. Included in that discussion also is the history of physiognomical thought which preceded the advent of Franz Joseph Gall (1758-1828), whose import in the history of ideas is assured by his having originated in the late 1700's a theory of mind--subsequently named phrenology--the tenets of which were ultimately eagerly embraced by his student and disciple Johann Spurzheim. Gall's unique views on the nature of mind are discussed at length allowing for a comparative and similar discussion of his disciple's views which is also included. Those discussions are followed by a recounting of phrenology's status in America prior to 1832, and that in turn by the focal events of the research, viz., Spurzheim's American tour and untimely death, his influence on the Boston

scientific community in 1832, and an account of the formation and conduct of the Boston Phrenological Society--a society which was among the most prestigious American scientific assemblages of the era (if not the most prestigious), and a society which was devoted totally to the scientific examination of phrenology, a doctrine which today in a presentistic world, has found little sympathetic understanding. A number of conclusions grow out of this investigation. Some of these follow:

1. To Gall alone has history traditionally assigned approbation as the creator of organological thought. It is concluded herein, however, that that assigned approbation must be more appropriately shared to a greater degree with his disciple Spurzheim who was almost solely responsible for the widespread dissemination of phrenological theory, and who was responsible for bringing Gall's views into line with the social problems of his day.

2. While Spurzheim's extensions of Gall's main theses have often been viewed with question, it is concluded here that his extensions were logical ones, and, more importantly, they were responsible for long lasting reforms in such diverse areas as education, penology, and the care and treatment of the mentally ill.

3. In seeking to understand what it was about Spurzheim or his views that could promote the formation of special societies whose goals were to solely investigate

his theories, it was concluded in part that this evangelical missionary zeal regarding the dissemination of his doctrines, when coupled with his essentially optimistic attitude toward the nature of mankind and his (as it was discovered) powerful personality, were sufficient to provide the inspiration for those events during a period of time when England and America were both ready for a better picture of their world than Calvinist determinism had taught them.

4. In regard to the Boston Phrenological Society in particular, it was discovered that that assemblage was composed of the most prominent scientific men of Boston of the 1830's. It was further discovered that this group had strong and consistent support of the American medical community of the period. More importantly, however, and, contrary to original expectations, it was learned that this society's ultimate disbandment was almost solely attributable to their concluding that phrenology was, as a result of their investigations, proven to be true, and, therefore, they concluded, little more needed to be done.

5. Finally, this research has led to the very important conclusion that any investigation of the history of phrenology must take serious notice of the fact that not all phrenologists were the practicing "bumpologists" that the word phrenology has come to connote. As a result of this investigation it is concluded that there were two main types of phrenologists, the legitimate scientists and the charlatans. The legitimate phrenological scientists sought to

"test" phrenology's claims via the inductive method, an approach that they were convinced was scientific in the best sense of that word. Those who were responsible for making phrenology a divinatory characterological art are not deserving of the extended attention of historians of science. The former, however, the scientific phrenologists, are deserving of greater scrutiny than they have heretofore received.

CHAPTER I

INTRODUCTION

The names Franz Joseph Gall and Johann Christoph Spurzheim are recorded in history as the "founders" of a theory of mental philosophy which developed into a system known as phrenology. Both of these personages, and the term phrenology itself, have come to connote a variety of meanings for contemporary man, most of which are less than flattering. For many, for example, phrenology represents an aspect of the history of the behavioral sciences which is best left undisturbed. For them, to reintroduce phrenology--an idea which, like many others in the history of science, is seen as not having been guided by insightful genius--seems to be comparable to political muckraking. This type of thinking when it occurs might be termed presentistic insofar as it suggests the belief that only those events of history which are clear anticipations of current knowledge should be revered. All ideas which fall outside the realm of the inspired are relegated to the historical "muck" which ostensibly need not be "raked."

The presentist mentality, unfortunately, has a long tradition in the sciences; for, scientists do not like to be reminded of errors in their past since it seems to suggest

to them the absence of a methodical orderly progression in their acquisition of knowledge. It is the duty of the historian of science, therefore, to not only become cognizant of the errors and achievements of the past that are related to current knowledge--and to communicate them to his less history-minded brethren--, but it is also his duty to deal fairly and objectively with all earlier ideas regardless of how peripherally they relate to current belief, and regardless of how they have traditionally been treated. Although history may repeat itself, historians need not--and indeed should not--repeat unquestioningly the historical observations of others. Traditionally, phrenology and its founders have been given cursory treatment in textbooks in the behavioral sciences. This dissertation is presented in part to rectify that injustice.

In the chapters to follow, the writer intends to trace the antecedent events and ideas which led Gall to first formulate his organological views, and Spurzheim to develop his unique system of phrenology. The focus or culmination of the work will thereafter be on the development of "scientific" phrenology in the United States, ultimately with especial reference to Spurzheim's providing the impetous for the formation of the Boston Phrenological Society. That society, whose organization and activities are to be treated at length, was comprised of many prominent figures of Victorian Boston. It was most active during the middle to late years of the 1830's, and was formed for the specific purpose of testing the

truthfulness of Spurzheim's theories in a "scientific" manner. The author intends to touch upon "popular phrenology" so-called--i.e., the type of characterological phrenology which comes to mind most often today when the word phrenology is mentioned--only peripherally since it is believed that that aspect of the history of this unique doctrine is sufficiently well known.

Pursuant to the intent as outlined above, the writer has been guided by a number of questions in the preparation of this work. Apart from writing the history of the events which preceeded Spurzheim and influenced the development of his views, but, specifically in regard to the scope of his influence in Boston in and around 1832, the writer sought to determine, for example,

1. what it was about Spurzheim personally, his theoretical system, or his presentation of himself and his ideas that prompted intelligent well-educated men in Boston to formally organize themselves after his death in 1832 to scientifically investigate his claims;

2. what it was about the goals of that organization that could attract almost 150 members, many or most of whom were professional men;

3. to what degree the Boston Phrenological Society as it came to be called actually engaged in the scientific inquiry they planned to pursue;

4. to what purpose their vast collection of human skulls, and plaster casts of heads, skulls, and death masks was put as a source of data for them; and,

5. what it was that caused the organization's ultimate demise.

In regard to the last point, it should be mentioned that the writer at one time entertained the hypothesis that the Boston Phrenological Society ultimately disbanded due to the fact that the membership came to the conclusion that phrenology had no foundation in nature. As the reader will discover, his research led him to support the antithesis of that, i.e., he discovered that the society actually disbanded due to the fact that most of the membership concluded that phrenology had strong empirical support. They concluded, thereafter, that there was no longer a necessity for the vigorous data gathering that characterized their early enthusiastic years; and, since many members eschewed the practical application of their discoveries--which would have been the most logical next step--, those practical applications were left to the more loyal leaders of the organization while the rank and file went their separate ways.

But our story is more complex than this brief introduction suggests. We must begin at the beginning, therefore, with the events impinging on the founding of the theory it was the Boston Phrenological Society's ultimate determined object to test. To those events we must now turn.

CHAPTER II

FRANZ JOSEPH GALL AND THE FOUNDING OF A THEORY

"Of Dr. Gall, and his skulls, who has not heard?" With this rhetorical question the earliest published account in English which described the theories of Franz Joseph Gall (1758-1828) began. The question appeared at the opening of Thomas Brown's (1778-1820) article in the Edinburgh Review for April, 1803. The article was a review of a letter from Charles Villers to Georges Cuvier (1769-1832) on Gall's "New theory of the brain."[1] The reviewer was decidedly unsympathetic. He found Gall's ideas "amusing," and seemed surprised at the fact that Gall and his theories were not quite dead--even, as will be shown, at this very early period. The general tone of the piece is one of unrestrained pessimism, suggesting as it does that the "new theories" would be ephemeral at best. One hundred and thirty-nine years later, Walter Bromberg--with equal, albeit retrospective, pessimism--suggested that it was the neurotic character of Gall, based on his feelings of inferiority about his own body, which compelled him to rationalize his deficiencies

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[1]C. Villers, Lettre de Charles Villers, à Georges Cuvier, de l'institut national de France sur une Nouvelle Théorie du Cerveau (Meta:1802), and, anon., "Review of Lettre de Charles Villers . . . ." Edinburgh Rev. 2 (April 1803): 147-160.

and ease his "mental conflicts" regarding them by developing a theory which would account for their presence. Bromberg is as decidedly off base in this simplistic analysis as he was later in the same article when he stated that Gall succumbed to "the enthusiasm of a public to whom science was an entrancing toy" by abandoning his anatomy in favor of "phrenology." Gall never did any such thing.[2] Why is it, therefore, that this prominent historian has fallen into the same proverbial trap which has ensnared many an able-minded historian before him, viz., falling victim to the easy perpetuation of untruths concerning the founder of and the history of what came to be known as phrenology? It is probably for the same reason that others have been similarly ensnared, namely, they have found that the path of least historical resistance is one which simply restates the old "myths" regarding Gall and phrenology--the ones often dearly held by the historian's equally unquestioning confreres--with, perhaps, a few idiosyncratic embellishments. It is a path which most often, either intentionally or unintentionally, eschews the primary sources, and, by doing so, perpetuates historical error. But this is not the place for polemics. Bromberg, is only a representative of this mentality; and, he is too well known an historical critic to be dismissed on such a technicality.

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[2] W. Bromberg, "Some Social Aspects of the History of Psychiatry," Bull. Hist. Med. 11 (February 1942):117-132.

Be that as it may, there are historians who have indicated an accurate historical appreciation of Gall, his disciple, Johann Christoph Spurzheim (1776-1832), and the course of phrenology's unique history. Most of this interest, however, has come from medical historians, but more recently others have come forward who have an expressed interest in vindicating in part the work of those phrenologists (including Gall and Spurzheim) who were approaching the study of that "novel view of mind" using what was at the time the legitimate modus operandi of science, viz., the inductive method. To be specific, there were two types of phrenologists. The one which has received the most attention is the "practical popular phrenologist." He accepted the truthfulness of phrenology unquestioningly, and applied its doctrines in a sideshow fashion. Furthermore, he developed idiosyncratic systems which made him appear unique, and, as a result, promoted his own business interests. By making "practical" and "popular" that which was not supported by fact, he contributed to the development of disdain for the entire movement which grew insidiously among those who eschewed the "practical" until all the facts were in. Those who approached phrenology as a "science" on the other hand, sought to establish phrenology's truthfulness or falsity by appealing to nature in true inductive fashion. It is beside the point, for the moment, to argue that their initial assumptions were erroneous. They did not append the title "Professor of Phrenology" to their name and offer simplistic solutions to the analysis of

human nature to an eager but credulous public. Rather, they preferred to be considered "students" of the new "science," seeking for themselves--or in groups--the answers to their queries regarding its validity. "Nature is constant and ever within the reach of those who would examine for themselves," Spurzheim wrote in 1832, suggesting to his reader to not simply accept his views unquestioningly; "and by self-examination," he went on, one will "obtain self-conviction and truth."[3] Assuredly, and to the detriment of scientific phrenology, the "practical practitioners"--"those sophomores and blue stockings, who . . . [ran] about applying their calipers, or their fingers to their neighbors heads, and pronouncing upon their dispositions"[4]--are the ones which are the most memorable today. Ambrose Bierce's definition of "physiognomy" in his Devil's Dictionary (1906) is really more descriptive of 19th century practical phrenology than it is of physiognomy, per se. "Physiognomy," Bierce tells us, was "the art of determining the character of another by the resemblances and differences between his face [and head] and our own, which is the standard of excellence."[5]

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[3]G. Spurzheim, Outlines of Phrenology (Boston, 1832), p. iii.

[4]S. G. Howe, An Address Delivered at the Anniversary Celebration of The Boston Phrenological Society (Boston, 1836), p. 8.

[5]A. Bierce, The Collected Writings of Ambrose Bierce (New York, 1966), p. 325. Bierce's definition of phrenology is equally humorous but less descriptive, viz., "phrenology, N. The science of picking the pocket through the scalp. It consists in locating and exploiting the organ that one is a dupe with."

This humorous conception of what might be termed the divinatory aspect of phrenology is, for the most part, the simplistic conception of this doctrine which has prevailed to this day.

It is the purpose of this writing to critically examine the rise and fall of "scientific phrenology" in Boston, Massachusetts during the years 1832-1842. It should be pointed out, however, that the scientific investigation of phrenology did not originate here, nor was interest in phrenology by Americans, or Bostonians for that matter, restricted to these dates. The years 1832-1842 represent the years during which the Boston Phrenological Society was active. This society had the distinction of having for its membership prominent men in the sciences and the arts, all of whom--in the beginning--had been involved in one way or another with Spurzheim's visit to Boston in 1832. The society was formed--probably not dispassionately--immediately after Spurzheim's untimely death, and on the evening of his funeral, November 17, 1832. It organized "for the purpose of investigating the science of phrenology and its bearing upon the physical, intellectual, and moral conditions of man."[6] As distinguished from other, and, sometimes earlier, societies, it was not formed simply as a "social club." It was formed, rather, to test phrenology's validity. To

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[6]N. Capen, Reminiscences of Dr. Spurzheim and George Combe: and a Review of the Science of Phrenology, from the Period of its Discovery by Dr. Gall, to the Time of the Visit of George Combe to the United States, 1838, 1840 (New York, 1881), p. 120.

illumine and make more meaningful the activities of this organization--representing, as it must, a legitimate attempt by scientists of the period to test phrenology's truthfulness--, it will be necessary to 1) indicate the antecedents of phrenological theory, 2) trace the history of Gall's discovery of his doctrines and discuss the nature of his system, 3) discuss the system developed by his disciple Spurzheim, 4) give an account of the state of the phrenological art in America prior to Spurzheim's arrival and prior to the formation of the society in question, and 5) discuss the scope of Spurzheim's influence in Boston in 1832, as a result of which The Boston Phrenological Society was formed. Parts 1 and 2 above are to be discussed in the remaining sections of this chapter. Parts 3, 4, and 5 will be discussed separately in chapters to follow.

The Antecedents of Phrenology

What came to be known as "phrenology" under Johann Christoph Spurzheim traces its origins to the anatomical-physiological inquiries concerning the functioning of the brain which were conducted late in the 18th century by Franz Joseph Gall.[7] Gall had announced his theories publically to the world--at least to the German reading world--in a letter to Joseph Freyherrn von Retzer in 1798.[8]

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[7]The word "phrenology" was first used by Benjamin Rush as early as 1805 in B. Rush, On the Utility of a Knowledge of the Faculties and Operations of the Human Mind, to a Physician, in Sixteen Introductory Lectures (Philadelphia, 1811), p. 271. This is discussed in P. S. Noel & E. T. Carlson, "Origins of the Word 'Phrenology,'" Amer. J. Psychiat. 127 (November 1970):694-697. "Phrenology," from the Greek, may mean either mind (phren)--discourse (logos) or mind--knowledge. Probably independent of Rush, Thomas Forster first used the word in its accustomed meaning in his Sketch of the New Anatomy and Physiology of the Brain and Nervous System of Drs. Gall and Spurzheim, Considered as Comprehending a Complete System of Phrenology (London, 1815). In a subsequent issue of this work Forster changed the word "phrenology" in the title to "zoonomy." Spurzheim, a friend of Forster's, first used the word in 1818 in J. G. Spurzheim, Observations sur la Phraenologie, ou la Connaissance de l'Homme Moral et Intellectuel, Fondee sur les Fonctions du Systeme Nerveux (Paris, 1818). He may have arrived at the term independently, obtained it from Forster, or picked it up from Rush (cf. Noel and Carlson, p. 696).

[8]F. J. Gall, "Des Herrn Dr. F. J. Gall Schreiben ueber seinen bereits geendigten Prodromus ueber die Verrichtungen des Gehirns des Menschen und der Thiere an Herrn Jos. Fr. von Retzer," Der neue Deutsche Merkur, 3 (n.p., 1798): 310-335; French trans. G. Fossati in J. de Soc. Phrenologique de Paris (Paris, 1835), and in Questions Philosophiques, Sociales et Politiques (Paris, 1869), pp. 277-302. English trans. in Capen, pp. 70-86.

Although Gall tells us that his studies originated from observations made at "an early age" (meaning his youth), we know for sure that he was elaborating his doctrine as early as 1792 and began public lectures in Vienna in 1796.[9] Gall was accused of being nothing more than a physiognomist. He denied that his theory was a physiognomical one,[10] but he knew of the physiognomical writings of Johann Caspar Lavater (1741-1801) who began publishing his theories in 1772.[11]

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[9]E. Ebstein, "Franz Joseph Gall im Kampf um seine Lehre," in C. Singer and H. E. Sigerist, eds., Essays on the History of Medicine Presented to Karl Sudhoff (London, 1924), pp. 269-322, and M. Neuburger, "Anhang zu den Briefen Galls," Archiv f. Gesch. d. Med. (n.p., 1919):93-101.

[10]In his letter to Retzer, Gall stated quite emphatically that"'I am nothing less than [this may also be translated from the German as 'I am a little less than . . .'] a physiognomist. I rather think, that the wise men have baptized the child before it was born; they call me craniologist, and the science, which I discovered, craniology; but in the first place, all learned words displease me; next, this is not one [i.e., physiognomy or craniology is not a term] applicable to my profession, nor one which really designates it," from N. Capen, "Biography of Dr. Gall," in F. J. Gall, On the Functions of the Brain and of Each of its Parts: With Observations on the Possibility of Determining the Instincts, Propensities, and Talents, or the Moral and Intellectual Dispositions of Men and Animals, by the Configuration of the Brain and Head, trans. W. Lewis, 6 vols. (Boston, 1835), 1:17-18. Either way the first statement of this quote is translated, it could connote the idea that Gall saw himself as a physiognomist--or unintentionally implied that. To be "nothing less than," a "little less than," or "no more than" something or other, however, can mean "equal to" or "almost equal to" whatever the referent is.

[11]J. C. Lavater, J. C. Lavater von der Physiognomie (Leipsic, 1772); q.v. T. Holcroft, "Memoirs of the life of J. C. Lavater," in J. C. Lavater, Essays on Physiognomy: Designed to Promote the Knowledge and the Love of Mankind, 11th ed. (London, 1860), trans. T. Holcroft, p. lxxviii.

Lavater's great work, the Physiognomische Fragmente, was published at about the time Gall began his medical studies in 1777.[12] Furthermore, Goethe, who contributed a "eulogy on the appearance of Brutus" to Lavater's publication,[13] was, in addition to being a friend of Lavater, an auditor at Gall's lectures in Jena (1 August to 7 August, 1805.)[14] According to Lewes,

> All who acknowledge the very large debt which physiology and psychology owe to Gall's labors . . . will be glad to observe that Goethe not only attended Gall's lectures, but in private conversations showed so much sympathy, and such ready appreciation, that Gall visited him in his sick-room, and dissected the brain in his presence, communicating all the new views to which he had been led. Instead of meeting this theory with ridicule, contempt, and the opposition of ancient prejudices--as men of science, no less than men of the world, were and are still [in 1856] wont to meet it--Goethe saw at once the importance of Gall's mode of dissection (since universally adopted), and of his leading views . . . Gall's doctrine pleased him because it determined the true position of psychology in the study of man. It pleased him because it connected man with nature more intimately than was done in the old schools, showing the identity of all mental manifestation in the animal kingdom.[15]

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[12] R. D. Loewenberg, "The Significance of the Obvious: An 18th Century Controversy on Psychosomatic Principles," Bull. Inst. Hist. Med. 10 (1941):666-679. On p. 671 Loewenberg publishes a facsimile of the title page of Lavater's great work of 1775.

[13] G. Brandes, Wolfgang Goethe (New York, 1936), p. 150 and passim.

[14] According to N. Capen, "Biography of J. G. Spurzheim" in J. G. Spurzheim, Phrenology in Connexion with the Study of Physiognomy (Boston, 1833), p. 23.

[15] G. H. Lewes, The Life and Works of Goethe: With Sketches of His Age and Contemporaries, From Published and Unpublished Sources, 2 vols. (Boston, 1856) 2:356. On Lewes on Goethe and Lavater, see 1:280-282, and 2:49; q.v. also

If Gall had never heard of Lavater when he first began developing his theory--a not very defensible thesis--, one can speculate that he most certainly must have exchanged ideas with Goethe on the aspects of his theories and those of Lavater which were similar. In any event, he was aware enough of physiognomy in 1798 to feel compelled to defend his views as being in essence nonphysiognomical, and, by the time his last opus appeared he was discussing Lavater directly.

Despite the fact that Gall had to contend with critics who saw his work as "no more than physiognomy," any attempt--including Gall's--to ascertain the internal disposition, character, state of affairs, structure, or whatever of an object or organism by the gross appearance of its external surface, or by isolated external configurations and/or alternations or idiosyncratic characteristics of form is "physiognomical." "Physiognomy" in the vulgar meaning of that word adds to this a prognosticatory interest whereby, when it is applied to any living being, attempts are made to predict character, behavior, and personality characteristics of the subject on the basis of the external lineaments of its body. Historically, the use of physiognomical methods or signs has ranged from the ridiculous to the sublime. At the one extreme we can find attempts to determine

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L. Lewisohn, Goethe: The Story of a Man, 2 vols. (New York, 1949), 1"passim; J. G. Robertson, Goethe (New York, 1927), pp. 52, 59, 76, and 80, and G. Morin, "Gall et Goethe: Goethe disciple de Gall," Paris Med., Partie Paramed. 72 (1929): 425-432.

character by moles on the body, the uniqueness of the fingernails, the lines of the forehead, the palms of the hands, the feet, and at one time perhaps every other external aspect of the human physique. At the other extreme we find the modern physician diagnosing the internal states of man in health or disease by specific external, and by extension, physiognomical, signs. He may speak of "Parkinson's facies," where a stolid expression of the face is pathognomic of paralysis agitans. Or, in eponymic respect for the founder of his art, he may speak of "facies hippocratica," referring to the drawn, livid, and pinched appearance of the face indicative of approaching death. That Gall was, perhaps, no less than a physiognomist (or no more), may not be a point of weakness in his theory. As a physician, he was trained in diagnosing disease. "Why not," he might have asked, "determine other bodily functions by external signs?" "Why not," he might have continued, "determine by the external appearance of the skull the shape of the brain? Why not, by extension, ascertain therefrom the functioning of the mind?" To appreciate Gall's work in the context of the era in which it appeared it is necessary to review its antecedents and determine thereby in part the sources of influence which may have directed and shaped his thought. Ideas relating to the history of the physiognomical antecedents of Gall will be discussed in greater depth than the more well known antecedent medical, anatomical, and physiological conditions; for Gall's early views were clearly physiognomical. His system, however,

involved the erection of an anatomical psychological superstructure over and above the physiognomical part--a superstructure which in Gall's later works assumed the dominant position.

The History and Character of Physiognomical Thought

The use of the divinatory arts in attempts to understand the nature of man has intrigued the curious since ancient times. Divination of character, for example, has taken many forms. In regard to its methods, as was previously mentioned, attempts have been made to determine character by means of moles on the body, the fingernails, the lines of the forehead, the hand, the feet, and probably every other aspect of the human physique. Physiognomy--variously spelled by the old writers as "fysenamy," "phisnomi," "physnomie," or "fisnomie"--is a term which, in its most common usage, refers to the "science" (or the "art") which has as its goal the determination of character and/or the disposition of the mind by means of the lineaments of the body. It has among its cultivators a two-fold purpose, according to Macalister, viz., it is "(1) a mode of discriminating character by the outward appearance, and (2) a method of divination from form and feature." Due to abuses in regard to the second purpose in England during the 18th century, an act of parliament (1743) forbade its practice deeming all those who did so "rogues and vagabonds" and subject therefore to imprisonment or public whipping.[16] Apart from a pseudo-Aristotelian tract dealing with the subject

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[16] Encyclopaedia Britannica, 11th ed., s.v. "Physiognomy," by A. Macalister.

and the great work of Lavater already mentioned--both of which will be discussed momentarily--a great many other publications were available in the years prior to 1800. After that date, physiognomy became inextricably intertwined with popular phrenological notions, studies of the origin of facial expression, criminal anthropology, and the like.

The history of interest in physiognomy per se is intertwined in the history of personality theory,[17] humoral theory,[18] "literary characterology,"[19] and religion (insofar as it was related to magic, witchcraft and divination).[20]

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[17] cf., e.g., G. W. Allport, Personality: A Psychological Interpretation (New York, 1937), pp. 65-97; J. McV. Hunt, ed., Personality and the Behavior Disorders (New York, n.d.), pp. 3-48; J. Jastrow, The Psychology of Conviction: A Study of Beliefs and Attitudes (New York, 1918), pp. 128-172; J. Jastrow, Wish and Wisdom: Episodes in the Vagaries of Belief (New York, 1935), pp. 230-269, 289-303; A. A. Roback, A Bibliography of Character and Personality (Cambridge, Mass., 1927), and A. A. Roback, The Psychology of Character: With a Survey of Temperament (New York, 1927).

[18] cf., e.g., M. Smith, "The Nervous Temperament," Brit. J. Med. Psychol. 10 (1930):99-174.

[19] R. Aldington, A Book of "Characters" (New York, 1924); J. Jastrow, "The Antecedents of the Study of Character and Temperament," Pop. Sci. Mon. 86 (1915):590-613; R. C. Jebb, The Characters of Theophrastus (London, 1909), and, the various works of Chaucer, Ben Johnson, Joseph Addison, Richard Steele, Samual Johnson, Samuel Butler and George Eliot (q.v. her Impressions of Theophrastus Such) which are included under the rubric of "literary characterology." Also, see The English Theophrastus attributed to Abel Bayer (n.p., 1702), Gay's Miniature Pictures (n.p., 1781), Fawcett's Social Silhouettes (n.p., n.d.), and Thackeray's Book of Snobs cited in Roback, Psychology of Character, p. 12 and passim, and McV. Hunt, p. 12.

[20] W. A. Lessa & E. Z. Vogt, eds., Reader in Comparative Religion (New York, 1965), pp. 314-326 (also, Sci. Mon. 75 [December 1952]:355-365.)

It is in the "Physiognomonica" falsely attributed to Aristotle (384-322 B.C.), however, that we discover the first systematic treatise on physiognomy per se.[21] The "Physiognomonica" opens by noting that

> Mental character is not independent of and unaffected by bodily processes, but is conditioned by the state of the body; and contrariwise the body is sympathetically influenced by affections of the soul. . . . There never was an animal with the form of one kind and the mental character of another: The soul and body appropriate to the same kind always go together, and this shows that a specific body involves a specific mental character . . . Supposing all this to be true (and it always is true) [the author adds modestly] physiognomy must be practicable.22

The argument proceeds from this beginning to the development of a "comparative physiognomical" treatise. This view states that to the extent that men resemble animals, for example, in either their gross appearance or their behavior, they will to a greater or lesser degree possess the same personality traits as the animals they resemble. This idea has come down to us today in such metaphors as "strong as an ox," to be "asinine," to be "leonine," to be pig-like in one's living habits and the like. Furthermore, this Aristotelian idea was to form the basis of 16th century physiognomical systems, and reached its most ludicrous

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[21] Aristotle (?), "Physiognomonica," in W. D. Ross, ed., The Works of Aristotle Translated into English (Oxford, 1961). This work is referred to by many as pseudo-Aristotle since its authenticity is questioned. For contrary views on this see Macalister. Also see A. Denieul-Cormier, "La très Ancienne Physiognomie et Michel Savonarole," Biol. Med. 45 (1956):1-107.

[22] Aristotle (?) 805^a, 1-4, 11-15, 18-19.

extreme in J. W. Redfield's Comparative Physiognomy: or the Resemblances Between Men and Animals which was published in New York in 1852. A few examples from Aristotle will serve to illustrate the tenor of his argument: He tells us that

> Hairy legs mean lasciviousness, as in goats.
>
> Too much hair on breast and belly means lack of persistence, as argued from birds, in which this bodily characteristic is most developed; but breasts too devoid of hair indicate imprudence as in women.
>
> Eyebrows that meet signify moroseness, by congruity: eyebrows that droop on the nasal and rise on the temporal side, silliness, as is seen in swine; [and,]
>
> A ridge of hair on the upper part of the forehead indicates a liberal disposition, as in the lion.[23]

The author also describes in some detail the signs one should be aware of and observe in one's analysis of others. These include, for example, bodily movements, gestures, color, characteristic facial expression, and so on. This is discussed more recently in Allport's summary of these early views.[24].

The writer would like to point out that not all aspects of the history of characterological thought are pertinent to a background discussion leading up to a description of the Zeitgeist around the time during which Gall began formulating his views. Allport has divided the history of

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[23]Ibid., 812[b], 14-19, 25-27, 35-37.

[24]Allport, pp. 65-78.

characterology such that the personages who emerge as its outstanding figures are classifiable as representing six different schools of thought. "Three have their sources in ancient Greece," he tells us, "viz., literary characterology, humoral psychology, and physiognomy; three are of modern origin: phrenology, ethology, and experimental characterology."[25] For Gall, the more physical theories relating to physiognomy and humoral psychology were more discernably influential than were the literary characterological writings which may have been popular at the time he began to expound his theories. Literary characterology is more directly pertinent to a more general history of attempts to explain personality and is, therefore, not of singular importance to a background discussion of antecedent ideas related to Gall's views. Humoral psychology, on the other hand, did develop to a point where we find Lavater discussing a theory of "temperament" in his work; and, later, we find Spurzheim dealing with this in a separate opus.[26] Humoral psychology, physiognomy and phrenology became intertwined in the 19th century. Literary characterology seemed to proceed somewhat separately, more as the art form that it is than a theory per se. To appreciate how physiognomy did progress subsequent to the "Physiognomonica," it is

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[25] Ibid., p. 55.

[26] G. Spurzheim, Phrenology, in Connexion With the Study of Physiognomy: Part I, Characters (London, 1826); reissued in 1833 (see n. 14).

necessary to back up a bit in time to Hippocrates in whose writings the ground work for a "humoral psychology" is first found.

Adopting the view of Empedocles that the universe was composed of four basic elements--air, earth, fire and water--Hippocrates (460-370 B.C.) proposed that corresponding respectively to these elements were the "qualities" warm-moist, cold-dry, and cold-moist. Out of this grew a theory of temperament which related the above to the bodily humours and was later picked up and elaborated by Galen of Pergamun, 130-200 A.D. The four qualities combined with the four Empedoclean elements according to the following scheme:

hot + dry = fire	cold + dry + earth
hot + moist = air	cold + moist = water

"By reversing these equations, the four elements . . . could be resolved into their qualitative components."[27] From this view developed a theory of disease wherein health was viewed as a right mixture of the elements (crasis) and disease a disturbance of this relation (dyscrasia). Thus, by a combination of the four basic elements with their four qualities, and their corresponding bodily humours--blood was a combination of the hot and moist; phlegm was a combination of cold and moist; yellow bile of hot and dry; and, black bile of cold and dry--a system of "humoral psychology," and "humoral pathology" was developed. An illustration of the

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[27]F. H. Garrison, An Introduction to the History of Medicine, 4th ed. (Philadelphia, 1968), p. 89.

relationship of the "cosmic" elements, their corresponding seasons, bodily humors, and temperaments in addition to the corresponding behavioral traits associated with the pure temperamental types may be seen in Allport.[28]

It was Galen of Pergamon, however, who completed Hippocrates' four-fold classificatory system. Although his views on the temperaments were presented at their greatest length in his De Temperamentis, references to their relation to other factors are scattered throughout his writings. All writings on the subject of temperament from the 9th to the 18th century were translating Galen, according to Smith, sometimes with and sometimes without acknowledgment.[29] Galen, who, according to medical-historical authority, was "the greatest Greek physician after Hippocrates . . . [and] the founder of experimental physiology"[30] has his position too well preserved in history to necessitate an elaboration of his views and a defense of them here. His views in regard to the temperaments, for example, have been discussed at length in many current histories. Galen is said to have argued that there were nine temperaments in all, although some writers (e.g., Brett) indicate that the number was thirteen. Hermann Siebeck has been credited with this latter interpretation. His system is presented and discussed

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[28]Allport, pp. 63-65.

[29]Smith, p. 105.

[30]Garrison, p. 112

by Smith.[31]

Galen, who was mainly interested in formulating a theory of disease, developed what Garrison has termed an "abstruse and artificial combination of humoralism and Pythagorean number lore," involving 1) the doctrine of naturals (seven), 2) non-naturals (six), and 3) contra-naturals (three).[32] According to Garrison, this system is best described as follows:

> The seven naturals are the elements (4), the qualities (9), the humors (4), the members (4), the faculties (3), the operations (2), the spirits (3), to which were sometimes added the ages (4), the colors (2), the figures (5), and the sexes (2). The elements (4) are fire, air, earth, and water, the 9 qualities are hot, cold, moist, and dry, the qualities of fire (hot and dry), air (hot and moist), earth (cold and dry), and water (cold and moist), the ninth quality being a fairly equal distribution of heat, cold, moisture, and dryness in the body. The four humors are blood (hot and moist), phlegm (cold and moist, yellow bile (hot and dry), black bile (cold and dry). The 4 members are the fundamental (brain, heart, liver), the subservient (nerves, arteries, veins), the specific (bone, membranes, muscles), the dependent (stomach, kidneys, intestines). The 3 faculties are natural, spiritual, and animal. The animal faculties comprise cerebration via imagination (forebrain), cogitation (midbrain), and memory (hind-brain), also voluntary motion and sensation. Operations include the simple, viz., hunger (heat and dryness), digestion (heat and moisture), retention (coldness and dryness), and expulsion, (coldness and moisture), and the compound (due to appetites and sensation). The 3 spirits are the natural (from the liver to the body by the veins), the vital (from the heart by the arteries), and the animal (from the brain by the nerves). The ages are youth (hot and moist),

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[31] Smith, pp. 105-124, and R. S. Peters, ed., Brett's History of Psychology, 2nd ed. (Cambridge, Mass., 1965), p. 199 (q.v. also, H. Siebeck, Geschichte der Psychologie [n.p., 1880-4]).

[32] Garrison, p. 113.

> manhood (hot and dry), age (cold and dry), and senility (cold and moist). Colors (2) are red, white, yellow, and black, due to balance or excess of the humors, and those due to external temperature (heat and cold). Figures (5) are fat, thin, synthetic (cold and dry), squalid (cold and moist), and equable (balanced). Sexes are male and female. The 6 non-naturals (things not innate) are air, food, and drink, rest and excercise, sleep and waking, excretions and retentions (coitis), and mental affections. The 3 contranaturals (things against nature) are diseases, their causes and sequels. Galen divides diseases into three classes, viz., (a) those affecting similar parts or simple tissues (muscles nerves); (b) organic (affecting compound tissues); and (c) general or humoral, i.e., Dyscrasias (imbalance of the humors). Organic diseases comprise malformations and abnormities of size, position, and number (presence or absence). Causes of disease are (a) procatartic or exciting; (b) proegumenic or predisposing, and synectic or coincident. Symptoms follow the disease "as the shadow follows the substance," and are altered functions, vitiated qualities (vide supra) or results of both (morbid excretions and retentions). Signs show what the disease is (diagnostic, pathognomonic) or how it will end (prognostic). Fevers are three, viz., (1) ephemeral, in the spirits; (2) putrid, in the putrefying humors; (3) hectic, in the solids. Putrid fevers are four, viz., (1) synochal or continued (in the blood); (2) tertian (in the yellow bile); (3) quotidian (in the phlegm); (4) quartan (in the black bile). Inflammations are four, viz., (1) phlegmon (from blood); (2) eysipelas (from yellow bile); (3) edema, tumor (from coagulated phlegm); (4) cancer (from black bile). Therapeutics are either general, as dealing with the management of the six non-naturals, or specific, as dealing with diseases of similar parts or of organs and wounds. It is plain that this elaborate scheme of things is virtually a phase of Cnidian medicine which has left its mark upon text-books of practice up to very recent times.[33]

This Galenical schema influenced medical thought at least until the Renaissance 400 years later. Although Galen's writings on temperament influenced all writers on this subject

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[33]Ibid., pp. 113-114.

much longer, as was previously mentioned, they were more often influential through secondary and oftimes inaccurate reinterpretations of his views. Furthermore, as Watson has recently pointed out, "he was not consciously developing a psychological theory [at all]; temperament was for him simply one of the three principle causes of disease."[34] Galen's explanation of individual differences of behavior and emotion, therefore, occupied only a secondary position in his theory. He did speak of the "temperate" man as being the mean between boldness and fear, between hesitation and inconsiderate haste, between compassion and envy--i.e., a true friend, full of understanding and a lover of mankind. Physiognomically, the temperate man is physically symetrical, not too lean and not too fat, not too soft and not too hard, not too cold and not too hot--he has an abundance of long black and curly hair.[35] One wonders whether Galen fit this description. A "distemperate" temperament, on the other hand, with a predominance of

1. Cold, is,--cold to the touch--without much hair--fat--if cold in excess of a bluish colour--small veins;

2. Hot,--feels warm--less fat--ruddy colour--hair black and thick and veins large;

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[34]R. I. Watson, The Great Psychologists, 3rd. ed. (Philadelphia, 1971).

[35]Smith, p. 108, but cf. with W. H. Sheldon's "average type," in W. H. Sheldon and S. S. Stevens, The Varieties of Temperament: A Psychology of Constitutional Differences (New York, 1942).

3. Dry, is harder and more slender than the temperate [ectomorphic?]--inapt for motion, easily dry and parched--curly hair;

4. Humid, is softer and fatter,[36]

and so on. Galen insisted that

> . . . it is only on a basis of the temperament of the body that the differences between children in such characteristics as cowardice, boldness, stupidity and intelligence can be treated . . . [37]

Thus, he gave us an early child psychology of sorts. Galen did not deny the influence of external causes, however, since all diseases were supposed to be dependent upon the interaction of <u>three</u> factors:

1. The individual temperament (crasis);

2. procatarctic--i.e., original but external to the individual--factors; and

3. The constitution (katastasis) of the seasons, diseases of one season tending to vary with the constitution of that season.[38]

It was only in the later reinterpretations of the Galenical idea of the temperaments that temperament was viewed as something strictly innate, predetermining and unchangeable within the individual--i.e., one's constitution was predetermined and external factors could have little or no influence on it. Galenical tradition was to last at least until the monumental anatomical work of Andreas Vesalius

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[36]Smith, pp. 108-109.

[37]Ibid., p. 109.

[38]Ibid., pp. 109-110.

(1514-1564) who, by the publication of his De Fabrica Humani Corporis (1543), marked an "epoch in breaking with the past and throwing overboard Galenical tradition."[39] This event was followed less than 100 years later by William Harvey's (1578-1657) De Motu Cordis (1628) on the circulation of the blood which has been described as the "most momentous event in medical history since Galen's time."[40] About this same period also, in 1620, Francis Bacon's (1561-1626) Novum Organum appeared. It will be recalled that it was noted earlier that physiognomy experienced a tremendous vogue during the 16th century. It was during this period that some of the greatest works on this topic appeared; but, more accurate anatomy which was exemplified in works such as Harvey's resulted in a diminished interest in physiognomy in the 17th century. While the decline in interest in physiognomy continued into the 1700's, the works of Lavater which appeared toward the end of that era had a decided influence. Furthermore, although Lavater's work cannot be considered to be a meeting point for ancient physiognomy and Galenical "humoral psychology," his work did provide the inspiration for renewed interest in the former which, in the hands of later theorists, resulted in its combination with the latter. It is to Lavater and "modern physiognomy,"

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[39]Garrison, p. 218.

[40]Ibid., p. 248.

then, that we must now briefly turn.[41]

Although other 18th century physiognomical treatises were published prior to Lavater's (1772, and 1775-1778)--e.g., J. Clubbe's Physiognomy, Being a Sketch Only of a Larger Work Upon the Same Plan (n.p., 1763) and A. J. Pernety's Discours sur la Physiognomie (n.p., 1769)--, and, although several were published after his influence began--e.g., P. Camper's Dissertation sur les Variétés Naturelles qui Caractérisent la Physioguomie des Hommes (n.p., 1791) and J. G. F. Franz's Scriptores Physiognomoniae Veteres (n.p., 1780)--physiognomy and the name Lavater became synonymous after his work appeared.[42] When he died

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[41]The reader will find other accounts of these early views in A. Berndorfer, "L'histoire Esquissée de la Physiognomie," Ann. Med.-Psychol. 2 ([Paris], 1958):286-294, and A. Bouchet, "Jean-Baptiste Porta et la Physiognomie aux XVIe et XVIIe Siècles," Cah. Lyon. Hist. Med. 2 (1957): 13-42. The author has somewhat arbitrarily designated all physiognomy prior to Lavater as "ancient," in the very loose meaning of the word. The writings of Lavater were published well into the 19th century and editions of his work were published as late as the 1870's. Thus, when compared with other writers prior to him, he stands alone as a "modern" and significant guiding force in 19th and early 20th century developments. Loewenberg also designates Lavater as "modern." p. 666.

[42]H. Gernsheim and A. Gernsheim, in their L. J. M. Daguerre: The History of the Diorama and the Daguerreotype, 2nd ed. (New York, 1968), Plates 23 and 24, and pp. 115-116 discuss Lavater and his work in terms of the tremendous vogue it created for the silhouette and physiognomy. They discuss this in regard to history of photography and indicate that men and women of the late 1700's "fancied themselves students of physiognomy, and used to send Lavater their own and their friends' silhouettes for a character study, just as some people . . . send specimens of handwriting to a graphologist." p. 115. At this same period the "physionotrace" was invented in France to facilitate the production of "cheap" portraits, and an illustration was published in one of

in 1801, The Scots Magazine quite rightly acknowledged that he had been "for many years, one of the most famous men in Europe."[43]

Although psychology for the most part has disassociated itself from "physiognomy," due to its occult and dubious aspects, and although the medical profession does not generally view its work as being related to physiognomy, both disciplines could find in the writings of Lavater insights related to their work of surprising profundity. At least one recent writer is of the opinion that physicians should be the most enthusiastic defenders of physiognomy.[44]

Lavater's works and reproduced by Gernsheim and Gernsheim, Plate 24. The "physionotrace," according to these writers, was the second of three inventions which led historically to the development of photography. An illustration of the apparatus for producing "shades" (silhouettes) is also given in Holcroft's Lavater, n. 11, opposite p. 190.

[43] The Scots Magazine 63 ([Edinburgh], 1801):79, as quoted in J. Graham, "Lavater's physiognomy in England," J. Hist. Ideas 22 (1961):561-575. For a recent biography of Lavater see M. Lavater-Sloman, Genie des Herzens (Zurich und Stuttgart, 1955).

[44] "The medical profession's rule in ethics," Loewenberg (n. 12) tells us, "has always been . . . to see a patient first before giving any judgment." This fundamental psychosomatic principle was called physiognomic in the Eighteenth Century. Loewenberg shows in his work that ". . . in those days [in the latter part of the 18th century] the basic problems of psychosomatic relationship were clearly recognized and that their possibilities and limitations were thoroughly discussed . . . The foundations as laid down first in modern times by Lavater," he goes on, ". . . are just as valid today . . . Indeed one should expect that the physician should be the most enthusiastic defender of physiognomy."

For Lavater, physiognomy signified

> The exterior, or superficies of man, in motion or at rest, whether viewed in the original or by a portrait . . . Physiognomy [furthermore] is the science or knowledge of the correspondence between the external and internal man, the visible superficies and the invisible contents.[45]

Lavater also distinguished between physiognomy and "pathognomy." Thus

> Physiognomy, opposed to pathognomy [for Lavater], is the knowledge of the signs of the powers and inclinations of men. Pathognomy is the knowledge of the signs of the passions.
>
> Physiognomy, therefore, teaches the knowledge of character at rest; and pathognomy of character in motion.
>
> Character at rest is displayed by the form of the solid and the appearance of the moveable parts while at rest. Character impassioned is manifested by the moveable parts, in motion.
>
> Physiognomy may be compared to the sum total of the mind; pathognomy to the interest which is what a man is in general; the latter what he becomes at particular moments; or, the one what he might be, the other what he is . . . All people read the countenance pathognomically; few indeed read it physiognomically.[46]

Lavater concludes by stating that since physiognomy is much less studied than pathognomy, he confines his interest mainly to the former subject. It is curious that Gall, who denied vehemently any connection with physiognomy as it was then understood, did develop a system of "pathognomy" which he viewed as the study of the "natural language" of the faculties--i.e., their expression in motion. That is, although

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[45]Lavater, trans. Holcroft, p. 11. "Lavater-Holcroft" hereafter refers to this edition only.

[46]Ibid., p. 12.

highly critical of the conclusions drawn by physiognomists, Gall still found a place for their "pathognomy" (or, perhaps felt that he had to find a place for it) which he viewed in almost the exact same way as did Lavater. This point will be returned to later.[47]

Lavater proposes that "physiognomical sensation" is a universal phenomena. He is here dealing with the interpretation one makes, the prejudgments if you will, when one first encounters another visage. By "physiognomical sensation" he means "those feelings which are produced at beholding certain countenances, and the conjectures concerning the qualities of the mind, which are produced by the state of such countenances, or of their portraits drawn or painted."[48] The counterpart of this interest today will be found in the social psychologists' interests in "social perception," "interpersonal perception," "person perception," or, in general, "symbolic interactionism."[49]

Lavater was convinced that physiognomy was capable of becoming a science "as any one of the sciences, mathematics excepted."[50] By this he meant that physiognomical "truth" was reducible to rules, was capable of definition,

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[47]Gall, On the Functions of the Brain, 5:266.

[48]Lavater-Holcroft, p. 31.

[49]See, e.g., P. F. Secord, "Facial Features and Inference Processes in Interpersonal Perception," in R. Tagiuri and L. Petrullo, eds., Person Perception and Interpersonal Behavior (Stanford, 1958) pp. 300-315, and related works in Appendix C.

[50]Lavater-Holcroft, p. 37.

and could be communicated by signs and words "as a science." The later work of Sir Charles Bell (1774-1842), G. B. A. Duchenne (1806-1875), Herbert Spencer (1820-1903), Charles Darwin (1804-1882), Francis Galton (1822-1911), Havelock Ellis (1859-1939), Caesar Lombroso (1836-1909), Ernst Kretschmer (1888-1964), and W. H. Sheldon may be mentioned as a partial exemplification of this belief.[51]

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[51]Sir Charles Bell's Essay on the Anatomy of Expression (n.p., 1806) represented the first scientific study of the physical manifestations of emotions in terms of the muscles which produced them. This volume was reproduced several times throughout the 19th century, at least one time for a phrenological audience (see C. Bell, Expression: Its Anatomy and Philosophy . . . With the Original Notes and Illustrations Designed by the Author; and with Additional Illustrations and Notes by the Editor of the "Phrenological Journal" [Samuel R. Wells] [New York, 1883]), and on another occasion for artists (see The Anatomy and Philosophy of Expression as Connected with the Fine Arts [London, 1893]). G. B. A. Duchenne in his Mecanisme de la Physiognomie Humaine (Paris, 1862) studied the action of the muscles with electricity keeping photographic records and his observations supported Bell's earlier hypotheses. In 1855, Herbert Spencer speculated on the relationship of the physical action to the psychical state and this in turn was reduced to a system by Charles Darwin (see C. Darwin, The Expression of Emotions in Man and Animals [Chicago, 1965 [1872)]). In the introduction to this work Darwin gives general background information in addition to other details which the interested reader may wish to peruse. Spencer was interested in phrenology in his youth and went so far as to develop an apparatus to measure crania. Toward the end of the 19th century, around the period when Galton opened his Anthropometric Laboratory (1884)--but not necessarily as a result of it (see P. H. Du Bois, A History of Psychological Testing [Boston, 1970], p. 13)--interest developed in what was termed "criminal anthropology" which had as its goal the study of criminals mainly, it appears, from a physiognomical (i.e., physical) and psychical, standpoint. Caesar Lombroso and Havelock Ellis published notable works in this area. See, e.g., H. Ellis, The Criminal (New York, 1910 [1890]), and C. Lombroso, The Female Offender (New York, 1899). Kretschmer's views are presented in his Physique and Character: An Investigation of the Nature of Constitution and of the Theory of Temperament, trans.

But Lavater indicates partial insight into the difficulties involved in creating this "science," and concludes that only the rare insightful man is capable of becoming a physiognomist. His argument is weakened when, after indicating that a good physiognomist should have a thorough understanding of anatomy and physiology, he states that

> . . . no one, therefore, ought to enter the sanctuary of physiognomy who has a debased mind, an ill-informed forehead, a blinking eye, or a distorted mouth. . . . No one whose person is not well formed can become a good physiognomist.[52]

This idea is reminiscent of the Bierce definition of physiognomy given earlier (see n. 5 and text). Lavater follows this discussion with a brief entry into comparative physiognomy in which he cites Aristotle and Porta as his authorities, and this is followed by a section dealing with the skull which is decidedly suggestive of what eventuated in the hands of Gall. He begins this section with the following opening remarks:

> How much may the anatomist see in the mere skull of man. How much more the physiognomist. And how much the most the anatomist who is a physiognomist. I blush when I think how much I ought to know, and of how much I am ignorant, while writing on a part of the body of man which is so superior to all that science has yet discovered; to all belief, to all conception. It must have been already remarked that I take the system of

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W. J. H. Sprout, 2nd ed. (New York, 1970). Sheldon has been previously cited (n. 35). On Galton's views see his "The Measurement of Character," Fortnightly Rev. 42 (1884): 179-185.

[52]Lavater-Holcroft, pp. 63 and 66. The statements were in reverse order in the original.

> of the bones as the great outline of man, the skull as the principle part of that system, and that I consider what is added almost as the colouring of this drawing; that I pay more attention to the form and arching of the skull . . . than all my predecessors; and that I have considered this most firm, least changeable, and far best defined part of the human body as the foundation of the science of physiognomy.53

It is interesting to speculate what Gall's reaction might have been when first reading this. It is very plausible to assume that if he did read it, it may have formed the source of his later work. Lavater develops arguments related to the growth of the skull by discussing the differences between the skulls of children and those of adults. In addition, he cites ethnographic data on the anthropometric differences between the skulls of various nations (the phrenologists are the one's who are usually credited with beginning this aspect of comparative physical anthropometry). He further develops the idea proposed by Pieter Camper (1722-1789) (whom he cites) that "stupidity is occasioned by the angle which is formed by the forehead and the bone of the nose" (Camper's "facial angle").[54] Finally, he deals briefly with the doctrine of the temperaments, discusses "medicinal semeiotics; or the signs of health and sickness," and, in the Holcraft 1860 (11th) edition, includes a section of one hundred physiognomical

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[53] Ibid., p. 233.

[54] See also C. Bell in his Expression: Its Anatomy, pp. 21-44 and quoted in n. 2 in A. A. Walsh, "The American Tour of Dr. Spurzheim," J. Hist. Med. 27 (1972):187-205.

rules (a posthumously published work). These rules are interesting and could possibly be put to the test, e.g.

1. Rule LXIII. Stupidity. The greater the angle is, which the profile of the eye forms with the mouth, seen in profile, the more feeble and dull is the understanding [the lower the I.Q.?];

2. Rule LXVI. Stupidity. Every countenance is stupid in which the eyes are discernibly more distant from each other than the breadth of the eye (intelligence has an inverse relationship to the distance between the eyes); and a rule which may have influenced the thinking of Gall in his youth;

3. Rule XXI. Eyes. Eyes that are very large, and at the same time of an extremely clear blue, and almost transparent when seen in profile, denote a ready and great capacity (for Gall, large bulging eyes denoted great memory ability among other things).

That Lavater's theoretical views were far reaching is an undeniable historical fact. Some of the modern writers who are of this opinion have already been cited, e.g., Graham and Loewenberg. Other writers have dealt with Lavater more narrowly.[55] Period treatises appeared which developed his views in very esoteric ways--e.g., R. Lejeune's Essai sur la Megalanthropogénésie (1801)[56] as well as criticizing

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[55]See, e.g., G. T. Clapton, "Lavater, Gall et Baudelaire," Rev. Lit. Compar. 13 ([Paris], 1933):259-298, 429-456; M. Allentuck, "Fuseli and Lavater: Physiognomical Theory and the Enlightenment," Studies on Voltaire and the Eighteenth Century 55 (n.p., 1967):89-112; G. Birtalan, "Lavater Fiziognomiai Torek Vesei," Orsz. Orvostört. Könyv. Közl. 212 (n.p., 1961) and, A. Sampalmieri, "Dalla Fisiognomonia di Giovanni Gaspare Lavater (1741-1801) alla Frenologia de Francesco Giuseppe Gall (1758-1828), "Med Secoli 5 ([Naples], 1968):10-16.

[56]Robert le jeune, des Basses-Alpes, Essai sur la Mégalanthropogénésie, ou l'art de Faire des Enfans d'esprit, qui Deviennent de Grands 'hommes, etc. (Paris, 1801)

them, e.g., J. Ottin's Précis analytique du système de Lavater (1834);[57] and, as was mentioned earlier, his works were continually published well into the 19th century.[58] Nineteenth century developments relating to physiognomy have already been mentioned (see n. 51, and for some contemporary work Appendix C). Spurzheim's involvement will be discussed in a subsequent section.

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[57] J. Ottin, Précis Analytique et Raisonné du Système de Lavater sur les Signes Physiognomoniques (Bruxelles, 1834).

[58] According to Graham, in less than forty years (to 1810), no fewer than fifty-five editions of Lavater's works appeared including 16 German, 15 French, 2 American, 1 Dutch, 1 Italian and 20 English versions. "The regular production of the work did not slacken," Graham tells us, "until about 1870 . . . and the two Swiss editions in the 1940's swelled the total to 156 publications in all languages," p. 562. A complete list of Lavater's works appears in J. Graham, "The development of the use of physiognomy in the novel" (Ph.D. dissertation, Johns Hopkins University, 1960). Lavater's exposure in the press clearly outranks Gall's.

Brain and Mind to the Late 1700's

Theories concerning the nature of brain and mind have also been advanced since ancient times.[59] The first concern with behavior as it was related to the nervous system occurred in the fourth century B.C. with the philosophers Plato and Aristotle the dominant central figures. While it is possible to find in the work of Aristotle sufficient insight into almost all the sciences to justify his being labeled the "father of" this or that discipline, his import in regard to knowledge of the relationship between the brain and the mind is somewhat questionable. His somewhat bizarre notion that the brain itself did not extend to the back part of the skull--i.e., that its locus is in the front only--, and that the back part of the skull was "quite empty"--has led one critic to assume that he probably never saw a human brain. This in itself is not particularly unusual for as the history of anatomy has shown, it would be several hundred years later before our knowledge of human anatomy would be based primarily on actual observation and dissection of the human body--a "sanctuary" which for centuries was considered inviolable.[60]

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[59] H. W. Magoun, "Early Development of Ideas Relating the Mind With the Brain," in G. E. W. Wolstenholme and C. M. O'Connor, eds., Ciba Foundation Symposium on the Neurological Basis of Behavior (London, 1958), pp. 4-5.

[60] G. H. Lewes, Aristotle: A Chapter From the History of Science, Including an Analysis of Aristotle's Scientific Writings (London, 1864).

According to Drayton and McNeill, "Aristotle, the first true physiologist . . . set the mind in the brain, and was an exponent of a system perhaps invented by him, perhaps recognized by his contemporaries . . . " which was a form of cerebral localization.[61] According to this view, to what he termed the first or anterior ventricle of the brain he attributed a common sensory function, in that he believed that from this area the nerves of the five senses branched off and to this area, by means of these nerves, all sensory input was received. To what he termed the second ventricle, connected with the first by a small opening, he attributed the functions of imagination, judgment, and reflection. In the last ventricle, his third, posterior to the second, he located memory. To this last ventricle, impressions received in the first, and "digested" in the second, would be sent for storage. There is not a great deal of support for this interpretation of Aristotle concerning the import of the brain; for, it is more generally known that he described the brain as

> . . . the coldest and bloodless of bodily organs, of the nature of water and earth, whose chief purpose . . . [was] to temper the excessive heat of the heart, as the cooler regions of the firmament condense the vapours rising from the earth.[62]

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[61] H. S. Drayton and J. McNeill, Brain and mind in relation to modern physiology (New York, 1879). p. 10

[62] Encyclopaedia Britannica, 11th ed., s.v. "Phrenology," by A. Macalister.

The seat of life for Aristotle was the heart, which he viewed as the "chief organ of the body and the center for thought and appreciation of sensation."[63] Plato, on the other hand, discussed the behavioral faculties--the soul--in terms of a tripartite division "whose properties corresponded to some extent to those of man, animals and plants."[64] Magoun offers the following summary of this Platonic idea:

> [According to Plato, the] . . . tripartite soul was localized in the marrow or, as we would say, in the parenchymal tissue of the cerebrospinal nervous system. The divine part of the soul, subserving intellect and reason, as well as sensation and voluntary motion, was planted highest in the spherical, globular marrow of the cranial cavity, which resembled in shape the earth and the universe. The mortal portions of the soul were distributed below in the elongate marrow within the vertebral canal. A baser part, subserving desire and appetite, was situated lowest in the spinal marrow, behind the abdominal and pelvic cavities. A higher part, subserving passion and emotion, controlling the appetites, was placed somewhat more cephalad [superiad] behind the thoracic cavity.[65]

Not all early writers followed the Platonic tradition. Many held views similar to Aristotle's and the early Hebrew authorities, for example, referred only thoughts and affections to the heart--"judgment" was variously located in either the head or the kidneys. The Egyptians held corresponding opinion.

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[63] E. Clarke and C. D. O'Malley, The Human Brain and Spinal Cord: A Historical Study Illustrated by Writings From Antiquity to the Twentieth Century (Los Angeles, 1968), p. 8. See also W. Riese, A History of Neurology (New York, 1959), pp. 76-78.

[64] Magoun, p. 5.

[65] Ibid.

The views of Pythagoras and his followers were more in accord with modern opinion. They contended that the mind or the intellect (the reasonable soul) had its seat in the brain. Alcmaeon, a Pythagorean disciple, also held the somewhat bizarre view that the human semen emanated from this organ. The views of Pythagoras were comparable to those of Plato, Hippocrates became Pythagorean rather than Aristotelian, and ultimately it was the Pythagorean view that prevailed.

Another form of cerebral localization, more sophisticated than the Aristotelian view, was promulgated in Egypt by two prominent members of the Alexandrian school at the time of Ptolomy Soter, viz., Herophilus and Erasistratus. According to Galen and Celsus, they were "the two greatest anatomists known until that period,"[66] and Macalister considers them to be the "founders" of anatomical science (n. 62). Erasistratus contended that the sensory neurones arose in the menenges of the brain and the motor neurones in the cortical substance proper, while Herophilus posited that the vital forces resided in the ventricles. Herophilus' knowledge of cerebral anatomy was outstanding. Not only was he aware of the origins of the nerves, but he was the first to view them as organs of sensation, and the first to describe the vascular membrane lining the ventricles. Furthermore, he gave the earliest description of the fourth sinus (now called

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[66] R. Dunglison, History of Medecine From the Earliest Ages to the Commencement of the Nineteenth Century (Philadelphia, 1872), p. 138

the torcular Herophili after him) and the calamus scriptorius.[67]

During the period when the schools of medicine were experiencing their greatest dissensions, Galen appeared and assumed a unifying role for the science of physic. He was well schooled in the writings of Aristotle and Plato and spent much of his time illustrating the writings of Hippocrates which he felt were mispresented by earlier writers (cf. the earlier discussion of Galen and the temperaments). Massaria, a Pavian professor in the 16th century was so highly influenced by this man that he "absolutely . . . [declared] that he would rather err with Galen than be right with any other physician."[68] Galen taught directly that the brain was the locus of the soul and the intellect in addition to promulgating the views of Pythagoras, and the ventricular views as presented by Herophilus. The disciples of Galen adopted and promulgated his ventricular view of the brain; and, in addition, some of them presented the theory that the shape of the head was in some way related to the character and functioning of the mind. This latter view, of course, anticipates Gall.[69]

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[67]Ibid., p. 139.

[68]Ibid., p. 177.

[69]Macalister, "Phrenology."

In Arabia, the physicians Averroes (1126-1198) and al Rhazes (860-932)[71] adopted Galen's views in addition to proposing a four-fold ventricular localization theory originally presented by the Greeks. Avicenna (980-1036)[72] extended that theory by adding a fifth region. The writings of Avicenna rivaled those of Aristotle and Galen and according to Dunglison, "the doctrines of Avicenna were almost implicitly followed for nearly six hundred years."[73] The next important influence occurred in the 13th century which bore witness to a more exacting interest in cerebral localization. Albertus Magnus (1193-1280) presented a view of localization which was similar to the Arabian view. To the anterior portion of the brain (the lateral ventricles) he assigned the function of feeling or judgment, memory was assigned to the posterior region (our fourth ventricle), imagination was assigned to the middle region (our third ventricle), and so on.[74] In 1296, in a tract entitled

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[70] According to Dunglison, Averroes was a Spaniard (p. 198), Macalister (n. 62) considers him Arabian, and Watson (n. 34) discusses him in his section on "Islam" (p. 107).

[71] "Mohammed-Ebn-Secharjah-Abou-Bekr-Arrasi," Dunglison, p. 195.

[72] "Al-Hussain-Abou-Ali-Ben-Abdallah-Ebn-Sina," also surnamed "Scheikh-Reyes," or, "Prince of Physicians," Dunglison, p. 196.

[73] Ibid., p. 197. q.v. Macalister, "Phrenology."

[74] E. G. Boring, A History of Experimental Psychology, 2nd ed. (New York, 1950), pp. 50, 86; Macalister, "Phrenology," and Magoun, p. 10

Affectus Praeternaturam Curandi Methodus, Bernard Gordon, a scotch physician, posited a ventricular view, tripartite in nature, which followed closely the presentation made by Aristotle. Gordon contended that there were three faculties or virtues all of which were natural, corruptible, and have their organs in the brain, viz., Imaginatio, Cogitatio, and Memoria. Above all of these is a divine and incorruptible faculty, Intellect, which has no organ, but makes use of the previous three as a means of interacting with the external world. Each organ is independent and may, in disease for example, become affected while the others remain sound. Case studies were presented by Gordon in support of his contentions.[75] This latter view anticipated the phrenologists also, who, in their "organology," explained the idiosyncratic nature of certain conditions in insanity by referring to their manifestations as monomanias--i.e., derangements of individual cerebral organs.

While the period of the Renaissance (1400's-1700's) brought many major advances in the arts, it was not until relatively late in that period, however, that the major scientific works--which were to initiate what has been termed the beginning of the "modern period"--appeared. These were the De Fabrica Corporis Humani of Andreas Vesalius (previously mentioned) and the De Revolutionibus Orbium Coelestium of

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[75] cf. e.g., "Historical Notice of Early Opinions Regarding the Function of the Brain," The Phrenological J. and Misc. 2 (Edinburgh, 1824-1825):379.

Nicolaus Copernicus--both appeared in 1543. While Copernicus was attempting to convince science that the earth and the other planets revolved around the sun, Vesalius was preparing the first anatomical plates executed from nature. Vesalius found reason to doubt the authority of the ancients, particularly Galen. He was also highly critical of the views of the theologians who had adopted the Galenical view in support of their theology. His criticism was directed at their division of the functions of the mind into Imagination, Ratiocination, Cogitation, and Memory; for, he felt that such a division of mind resulted in a similar division of the brain. Furthermore, he confuted the Aristotelian ventricular view--adopted by some theologians--by presenting the argument that those parts of the brain in which the theologians located the rational faculties could be found in lower animals corresponding to the same parts in man[76]--another idea in anticipation of Gall.

In 1562, Lodovico Dolce, a Venetian, published a work on memory wherein he gave an account of the division of the brain similar to Gordon's. The work was entitled Dialogo di M. Lodovico Dolce. nel Quale si Ragiona del Modo de Accrecere e Conservar la Memoria and in this work he presented a head delineated "in a manner not unlike that of Dr. Gall."[77]

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[76]Ibid., pp. 382-383.

[77]Ibid., pp. 383-384.

Later, the phrenologists would develop the opinion that the systems of some of the early theorists and philosophers were deficient since, in their view (the phrenologists'), they failed to adhere to a systematic approach in their investigation (in the Baconian tradition). To some theorists, viz., Aristotle and John Baptista Porta, they give credit for having used systematic observation in the development of their theories, although they do not consider their methods to be as exacting as those later used by Dr. Gall.

The most pertinent contributions regarding the present discussion which were made in the 17th century were those by Willis, Descartes, and Bacon. During this century the science of anatomy was becoming more accurate; and, as a result, the physiognomical literature was declining in quality (see earlier discussion of this). Thomas Willis (1621-1675) developed a localization theory which was not ventricular in the Aristotelean or Galenical traditions. To the convolutions of the brain he attributed a memory function, to the corpus collosum the function of imagination, to the corpus striatum the function of sense perception, and, finally, he located specific emotions on the ventral portion of the cerebrum. The corpus striatum, thus, was the seat of the sensus communus and the three classic psychological functions were no longer represented in the ventricles of the brain as had theretofore been the custom. In regard to Willis' use of the anatomical term "corpus callosum" however, Clarke and O'Malley have pointed out that he used this term

to refer to all parts of the white matter of the brain as was then the custom.[78]

René Descartes (1596-1650), born ten years after the appearance of Porta's physiognomical work, established in his philosophy a dualistic, albeit interactionistic, view regarding the relationship of the mind and body. The mind (or soul) and the body were separate (dualism) but were capable of communicating with each other (interactionism). While the mind was generally localized in the entire body, it communicated with the body specifically in the pineal gland, the conarium. Other theorists had various views concerning the locus and nature of the mind or soul. Some advocated a psychophysical parallelism in opposition to the Cartesian view, while others promulgated a monistic theory. This disagreement was to prevail until the end of the 18th century. It was not until Gall and his disciples presented their views that the brain was finally accepted as the locus of the mind and credit is due to Gall for this.[79]

At the turn of the 17th century, the modern period of science per se was also coming into being.[80] During this century, along with the works of Willis and Descartes, the famous tomes written by Francis Bacon appeared, viz., his Novum Organum (1620), the Advancement of Learning (1605),

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[78]Clarke and O'Malley, p. 473. Also see on Willis H. Isler's Thomas Willis 1621-1675: Doctor and Scientist (New York, 1968).

[79]Watson, p. 250.

[80]Ibid., p. 141.

and New Atlantis (1614-1617). The inductive method and the necessity of extensive observation in the sciences as espoused by Bacon was the modus operandi which was to be adopted by Gall and his followers--Gall was to use Baconian methods almost exclusively. In any event, the phrenologist's ultimate reliance on the inductive method and observation to arrive at their generalization regarding the location of the various cerebral organs was the empirical approach upon which their entire theory was supported.

In the 18th century, British empiricism and associationism formed the Zeitgeist in regard to speculation on the nature of mind. Having begun in the 17th century under the influence of Thomas Hobbes, empiricism eventually was expanded in the hands of Locke, Berkeley, Hume, and Hartley. However, empiricism and associationism are, philosophically speaking, the parent of experimental psychology--according to Boring[81]--rather than the direct precursors of cerebral localization of function and phrenology.

The historical trend to this point in time has been for man to try to rationally explain his own consciousness. Satisfied that he has done so, he turned to external signs attempting to correlate them with specific behaviors; for, it was his goal, it appears, to find some clue which he could use to predict--and perhaps contr l--human behavior. Physiognomy provided such clues, but the mind of man remained

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[81]Boring, p. 169.

a mystery until Gall in his materialism, set philosophical man on a more appropriate, productive, and direct path to understanding.

Although Thomas Willis might legitimately be called the first "phrenologist" for his antiventricular cortical localization views, and, although it was Benjamin Rush who first used the term phrenology (see n. 7 and Chapter III), there is one other person whom the anti-phrenologists later exhumed in their attempts to discredit Gall's discoveries. This person was Emanuel Swedenborg (1678-1772). According to Boardman, no author before Gall had approached more nearly to Gall's doctrines than he.[82] Boardman points out that throughout Swedenborg's voluminous writings, "allusions to the dependence of the mental faculties on material conditions continually occur."[83] A few quotations from Swedenborg's writings will suffice to illustrate his level of insight. In his Angelic Wisdom Concerning the Divine Love and Divine Wisdom (Amsterdam, 1763) he indicates that the mind is firmly fixed in the brain:

> Will and understanding, which are the receptables of love and wisdom, are in the brains, in the whole and in every part of them, and therefore in the body . . . The life of man in its first principles is in the brains, and in its derivatives in the body . . . [We know this, since] from the feeling itself; since

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[82] A. Boardman, "An Introductory Essay and an Historical Sketch" in G. Combe, Lectures on Phrenology, 3rd. ed. (New York, 1846), pp. 50-51.

[83] Ibid.

> man perceives, when he exerts his mind and thinks, that he thinks in the brain . . . since if the brain is injured . . . the power of thought is weakened and sometimes the mind becomes deranged . . . [and] ask anyone of common perception where his thought resides or where he thinks, and he will say, in the head;84

and in 1764, he reaffirms this belief:

> Who does not acknowledge, when it is stated, that affections and thoughts are possible only in substances and their forms, which are subject? And as these exist in the brain, which is full of substances and forms, the forms are called purely organic;85

and, again in the Heavenly Arcana he states:

> . . . for the brain, where the mind of man is, has respect to ends in the body . . .;86

and, finally, this decidedly phrenological-like remark:

> Every man that is born has a disposition to all sorts of evil, which must be checked by education, and as far as possible, rooted out. This is first to be attempted by correction and punishment, then by good society and example, which leads to imitation; and, at last, good is secured upon a true and reasonable religious root. When these conditions are all observed, it is indicated by the beautiful skull of the individual. On the contrary, should the education be neglected, or no sudden misfortune, or opposition, hinder the first outbreakings of evil, or disorder, the evil afterwards becomes habit, and produces peculiar wishes, both in design and practice, which cause the formation of a badly shaped skull. The cause of the difference of skulls, in such cases is this: the peculiar distinctions of man, will and

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[84]Swedenborg, Divine Love and Divine Wisdon (New York, 1901), pp. 163-166.

[85]E. Swedenborg, Angelic Wisdon Concerning the Divine Providence (New York, 1899), p. 225.

[86]E. Swedenborg, Arcana Caelestia (New York, 1899), p. 462.

> understanding, have their seats in the brain, which is excited by the fleeting desires of the will, and the ideas of the intellect. Near the various spots where these irritations produce their effects, this or that part of the brain is called into a greater or less degree of activity, and forms along with itself corresponding parts of the skull.87

Despite the fact that it is interesting and potentially historically informative to speculate at length about this or that antecedent event, personage or idea which may have directly or indirectly influenced Gall, such speculation would be beyond the scope of this chapter. In addition, there has been a great deal written on Gall and his views both at the time and subsequent to his public statements of them. More recently there has been an increasing amount of literature available. Perusal of Appendix A will give the reader a good idea of the variety of information on or about him. For example, Spoerl has "traced" Gall's work to the speculative philosophy of Thomas Reid (1710-1792), Dugald Stewart (1753-1828), and the Scottish School going so far as to defend the thesis that Gall "obtained" his list of faculties from them.[88] Swazey has pointed out that the

> . . . atmosphere in which Gall matured at Strassburg and Vienna was that of the 'faculties' of the German empirical psychologists . . . [and, that] Gall's phrenology [re: he never used that term, see n. 7] is a blend of the French [sensationalist (via Condillac [1715-1780])] and

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[87] Walden, Memoir of Swedenborg (Copenhagen, 1806), cited in Boardman.

[88] H. D. Spoerl, "Faculties Versus Traits: Gall's Solution," Charac. & Pers. 4 (1936):216-231.

German schools of his time.[89]

But, Swazey also tells us, in Brombergian fashion, that "Gall was first of all a phrenologist, and undertook his studies of brain anatomy for a post hoc validation of his belief in action propre"[90] indicating--to say the least--a less than full understanding of his views. Swazey obtained her leads from a much earlier article by Bentley.[91] Despite all the antecedent conditions--philosophical, physiognomical, medical, anatomical, and psychological--, to Gall is due the credit of making the first significant attempt to localize cerebral function.[92] Boring has summarized his contributions thusly:

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[89] J. P. Swazey, "Action Propre and Action Commune: The Localization of Cerebral Function," J. Hist. Biol. 3 (1970):217.

[90] Ibid., p. 216.

[91] M. Bentley, "The Psychological Antecedents of Phrenology," Psychol. Monogr. 21 (1916):102-115.

[92] cf. e.g., J. Haldi, "Chronicles of Cerebral Localization of Psychic Function--An Historical and Critical Survey," New Scholas. 2 (1928):367-381. Also see The History and Philosophy of Knowledge of the Brain and its Functions (Springfield, Ill., 1958); M. A. B. Brazier, "The Growth of Concepts Relating to Brain Mechanisms," J. Hist. Behav. Sci. 1 (1965):218-234; Idem, "The Historical Development of Neurophysiology," in J. Field, et. al., eds. Handbook of Physiology (Washington, 1959), pp. 1-58; Idem, "The History of the Electrical Activity of the Brain as a Method of Localizing Sensory Function," Med. Hist. 7 (1963):199-211; M. Critchley, "Neurology's Debt to F. J. Gall (1758-1828)," Brit. Med. J. 2 (1965):775-781; W. J. Dodds, "On the Localization of the Functions of the Brain: Being an Historical and Critical Analysis of the Question," J. Anat. Physiol. Lond. 12 (1878):340-363; 454-494; 636-660; J. Soury, Le Systeme Nerveux Central Structure et Fonctions Histoire Critique des Theories et des Doctrines (Paris, 1899); B. Stookey, "A Note on the Early History of Cerebral Localization," Bull. N. Y. Acad. Med., 30 (1954):559-578; and

> The theory of Gall . . . is . . . an instance of a theory which, while essentially wrong, was just enough right to further scientific thought. It was right in the first place in establishing [once and for all] the brain as the 'organ of mind' . . . As long as the seat of the soul remained a matter for metaphysical speculation to be affirmed or denied on other than empirical grounds, there was no scientific approach for the study of mind . . . Another great impetus that . . . [Gall's views] gave to science was . . . of localization of function . . . In brief, . . . [it] was playing its ambiguous role as cause and symptom of the Zeitgeist which was moving mind away from the concept of the unsubstantial Cartesian soul to the concept of the more material neural function.[93]

To Gall and his views we must now turn.

A. E. Walker, "The Development of the Concept of Cerebral Localization in the Nineteenth Century," Bull. Hist. Med. 31 (1957):99-121. See also the varied sources in Appendix A, especially those of Ackerknecht and Temkin.

[93]Boring, pp. 57-58.

The Organological-psychological Theory of Franz Joseph Gall

That Gall was a proficient anatomist and a great psychologist there is no question. For, although his views have been repeatedly misrepresented, and, although he has been accused of having made the grossest errors on a theoretical level, and, although he has had calumny and animadversions of considerable volume and length thrust upon him since he began to make his views known to the world, he has survived it all. It is an understatement to say that he has not been ignored. But this is not entirely true. Except in but a very few (proportionately) cases, most of his critics have relied for their criticism of Gall on the criticisms of others. These others, more often than not, eschewed Gall's original writings. They have, rather, relied on interpretations of Gall's views as they were discussed in the multifarious works--both in the journals of the period and in separately published works--which have appeared since 1800. Gall's original works have yet to be translated into English, although a six volume edition of his final statement was so translated.[94]

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[94]Among the works of Gall which have not been translated into English are Answer and Refutation of the Ackerman [1806] Critique [of the theories of F. J. Gall] Issued by Several Students of Dr. Gall and Corrected by Himself (Heidelberg, c. 1806) (the original of this work is in German. I have only seen reference to the above title which was

But it would be beyond the purposes of this discussion to reintroduce polemics. For, although the writer is of the opinion that there is still a great deal about Gall and his work which could be said, when compared to Spurzheim and other aspects of phrenology's history, Gall has not been slighted. As the reader will gather from a perusal of Appendix A, there is enough material available on or about him to fill a small library. In any event, in this section information will be presented to allow for a comparative discussion of his and Spurzheim's views; for although Gall was the anatomist par excellence, it was Spurzheim who formed Gall's discoveries into a philosophical-psychological

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translated and discussed in E. Ebstein, "Gall in Defense of his Theory," Med. Life 30 [1923]:369-372); s.v. "Cerveau," in Dictionnaire des Sciences Médicales, 60 vols. (Paris, [1812-1827] 1813) 4 (cf. n. 3 in A. A. Walsh, "Introduction," in J. C. Spurzheim, Observations on the Deranged Manifestations of the Mind, or Insanity [Gainesville, Fla., 1970]); Discours d'ouverture, lu par M. le Dr. Gall à la Première Séance de son Cours Public sur la Physiologie du Cerveau, le 15 janvier 1808 (Paris, 1808); s.v. "Du Crane," in Dictionnaire des Sciences Médicales, Ibid., 7; Introduction au Cours de Physiologie du Cerveau, ou Discours Prononcé à la Séance d' ouverture du cours Public de l'auteur (Paris, 1808); Meine Reise durch Deutschland, s.n. l., 1806 (Attributed to Gall by G. Lanteri-Laura, Histoire de la Phrénologie: L'homme et son Cerveau Selon F. J. Gall [Paris, 1970], p. 239); Philosophisch-Medicinische Untersuchungen ueber Natur und Kunst im Kranken und Gesunden Zustande des Menschen (Leipzeig, Vienna, 1792, 1800), and several other works by him and Spurzheim. q.v. other foreign language works in Appendix A. See also n. 10 on Gall's 6 vol. work in English. Although the translator of Gall's English ed. is given as Winslow Lewis, B. Pasamanick has discovered evidence to indicate that it was translated by Isaac Ray (see "An Obscure Item in the Bibliography of Isaac Ray," Amer. J. Psychiat. 111 [1954]:164-171).

system for general consumption. "Gall never undertook the construction of a system,"[95] according to Hollander, for

> . . . he warned his readers [as early as c.1818 (?)] of the hasty conclusions and premature systematization, and the introduction of 'phrenology' by his pupil [Spurzheim] . . . he expressly disclaimed the pretension of [constructing a system] . . . it was Spurzheim who had a more metaphysical mind . . .[96]

The founder of phrenology was born Francis Josephus Gall on the 9th of March, 1758 at Tiefenbronn, about fourteen kilometres southeast from Pforzheim in Swabia, where the Schwabisch Mountains start, in the Dutchy of Baden, Germany. Gall's ancestry was Italian, and his grandparents, who lived in Milan, went by the name of Gallo. Gall was the sixth child of a family of ten. His father was a respected merchant and was also the mayor of Tiefenbronn. His family were strict Roman Catholics and it was their intention to have Gall prepared for the church. This was contrary to Gall's interests, however, his preference, we are told, being directed toward the study of medicine. The accounts of Gall's earliest physiognomical observations regarding his fellow classmates who had good memories and prominent eyes has been repeated hundreds of times in almost every account of Gall and his theories. The following is Gall's own account of these early events as quoted by Chenevix:

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[95]B. Hollander, In Search of the Soul and the Mechanism of Thought, Emotion, and Conduct, 2 vols. (London, New York, [1920]) 1:342. In this work is by far the most extensive treatment of Gall and his views to date (cf., however, with Lantéri-Laura).

[96]Ibid.

In the ninth year of my age, my parents sent me to one of my uncles, who was a clergyman in the Black Forest, and who, in order to inspire me with emulation, gave me a companion in my studies. I was, however, frequently reproached for not learning my lesson as well as he did, particularly as more was expected from me than from him. From my uncle, we were both put to school at Baden, near Rastadt, and there, whenever our task was to learn by heart, I was always surpassed by boys who, in their other exercises, were much my inferiors. As every one of those who were remarkable for this talent, had large and prominent eyes, we gave them the nickname of ox-eyed. Three years after this we went to school at Bruchsal, and there again the ox-eyed scholars mortified me as before. Two years later I went to Strasburgh, and still found that, however moderate their abilities in other respects, the pupils with prominent eyes all learnt by heart with great ease.

Although I was utterly destitute of previous knowledge, I could not help concluding, that prominent eyes were the mark of a good memory; and the connexion betwen this external sign and the mental faculty occurred to me. It was not, however, till some time afterwards, that, led on from observation to observation, from reflection to reflection, I began to conceive that, since memory has its external sign, the other faculties might very well have theirs. From that moment every person remarkable for any talent, or for any quality, became the subject of new attention, and all my thoughts directed to a minute study of the form of their heads. Little by little, I ventured to flatter myself that I could perceive one constant shape in the head of every great painter, of every great musician, of every great mechanic, severally denoting a decided predisposition in the individual to one or other of those arts. In the meantime I had begun the study of medicine, where I heard much about the functions of the muscles, of the viscera, &c.; but not a word about the functions of the brain. My former observations then recurred to me, and led me to suspect what I afterwards proved, that the form of the skull is entirely due to the viscus which is contained in it. From that instant I conceived the hope of being able one day to determine the moral and the intellectual faculties of man, by means of his cerebral organization, and of

> establishing a physiology of the brain. I therefore resolved to continue my researches, until I should attain my object, or find it impossible. The task would have been less difficult and I abandoned myself entirely to nature. But I had already learned too much of the errors and prejudices then taught upon those subjects, not to be biased by them; and I was still further entangled by the doctrines of metaphysicians, who teach that all our ideas come from our senses; that all men are born alike, that education and accident alone make them differ. If this be true, said I, no faculty can have an external sign; and to study the brain, its parts, and its functions, is absolute madness. Still I remembered my former observations: I knew that the circumstances in which my brothers and sisters, my school-fellows, my playmates, had, from their infancy, been placed were all alike. I saw that education was bestowed in vain on some persons,--that others had talents without it. I observed a proportionate variety in the dispositions of animals. Some dogs are born hunters, while others of the same litter cannot be taught; some are peaceful, some ill-tempered. In birds there is a similar diversity. The whole animal kingdom spoke then in favor of my strong surmises, and I resolved to prosecute my plan. It was not till thirty years had been spent in uninterrupted study, in observing men of every description, and in many countries, men remarkable for some talent or some defect, for some vice or some virtue; in studying inferior animals, domestic or wild, the inhabitants of air or of earth, that I ventured to embody my observations, and publish them in one comprehensive work.97

At the age of 19, Gall went to Strasbourg to begin his medical studies. It was here that he came under the influence of Jean Hermann (1738-1800) who gave him his

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97[R. Chenevix], "Gall and Spurzheim--phrenology," For. Quart. Rev. 2 (1828):3-4 (Gall gives essentially the same traditional account in vol. 1 of his 6 vol. (1825) work, Lewis translation, (1835), 1:57-69, n. 10).

first exposure to research and comparative anatomy. While there, he married a young Alsatian girl, Miss Leisler (d., 1825), who had nursed him back to health after a typhus attack. Ackerknecht and Vallois, in their monograph on Gall--Franz Joseph Gall, Inventor of Phrenology and his Collection (Madison, 1956)--have pointed out that Gall's marriage was not a happy one. He kept a menagerie at home including a female ape, dogs, birds, etc., a large anthropological collection, and had more than an idle interest in extra-martial affairs. These concerns, to say the least, would not contribute to marital harmony. He is known to have had several mistresses and to have sired an illegitimate son by the name of Hamann.

At the age of 23, in 1781, Gall departed for Vienna to attend the medical college, a school which had become well known since the times of Gerhard van Swieten (1700-1772) and Maximilian Stoll (1742-1788). Some biographers have stated that Gall was a favorite student of van Swieten's but noting the differences in the above dates the impossibility of this becomes evident. After 4 years of study, he was awarded the medical diploma in 1785 and proceeded to start a large and very successful practice.

His first published work dealt mainly with practical medicine. It appeared in 1792 under the title Philosophisch-medizinische Untersuchungen über Natur und Kunst im Kranken und gesunden Zustand des Menschen. This work was to be extended at a later date but this extension never appeared.

Ackerknecht and Vallois believe a second volume was sold by his second wife, Marrie Anne Barbe (b., 1795), in 1852 to Dr. Barbier of Lyon and may still be extant somewhere in France.

Gall's early observations regarding memory, as he indicated, led him to believe that prominent eyes were the mark of good memory and, at a later date, to assume that since memory had its external sign other faculties may very well have theirs also. He proceeded to verify these ideas inductively. Richard Chenevix, while acknowledging that Gall may not have been formally exposed to Bacon's inductive methods, contended that Gall conducted himself, in any event, in true inductive fashion. In Chenevix's words

> It is not very probable that, when Dr. Gall was a young student of medicine in a German university, he had acquired much intimacy with the writings of the great English chancellor; yet he certainly adhered to his mode of amassing knowledge as closely as if Lord Bacon had rocked him in his cradle. Not a single fact was assumed without repeated observation and verification; not a truth was admitted without proof; no a priori conceptions were greeted as demonstrations . . . By an intimate impulse, he followed, unconsciously, the precepts of Bacon, Gall, and of nature,---because Bacon, Gall, and nature were the same,--as unerringly as if the Novum Organum had been his primer [Italics mine].98

To add insult to plaudits, however, Chenevix added at the end of the above statement "thus say the phrenologists," indicating a bit of skepticism on his part. Gall continued

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98 Ibid., p. 9.

his research and in 1796 began giving private lectures on organology and craniscopy in Vienna and several of his auditors published notices of his doctrines (see Appendix A). In 1800 Spurzheim joined Gall as a pupil, and from this point on the progress of the as yet to be named doctrine of "phrenology" took a philosophical and physiological stride forward. Gall eventually settled in Paris, and with the exception of one trip to England in 1832, he remained there until his death (he had become a naturalized citizen of France in 1819). Subsequent to publishing his last formal statement in 1825, his health began to decline. He continued to lecture and maintain his medical practice, however, until he was stricken by an apoplectic seizure in April 1828. He died in Montrouge (near Paris) at the age of 70, on 22 August 1828 when the efforts of eight doctors failed to revive him.[99]

Gall's extensive works may be discussed from a number of points of view. Indeed, in some respects, one can find in them what one will insofar as he indicated insights of profound nature for both the health and behavioral sciences. His works are sort of like the Bible or the writings of Aristotle in this regard; for, depending on how one reads Gall or which works of Gall one reads, support may be obtained to name him, like Aristotle, the "founder" of

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[99]Of the numerous biographical accounts of Gall, see especially Hollander (n. 95) and the works of Ackerknecht, Vallois, Blondel, Fowler, Mobius, Ebstein, Temkin and others cited in Appendix A.

this or that science or theoretical point of view. But an Aristotle he was not. He was a provocative, insightful anatomist-psychologist. His theoretical position, therefore, will be briefly discussed in terms of his contributions to those fields, anatomy and the behavioral sciences.

Gall on Anatomy

In the "Advertisement" to Gall's six volume work he tells us

> When I speak in the plural number, I include with myself Dr. Spurzheim, who, having accompanied me in my travels, made a great part of the observations, referred to, in common with me.[100]

Although Gall made the original observations which led Spurzheim to develop a complete system of philosophy, both men, as Gall indicates, were anatomists in common during the years of their conjoint labors. But it is Gall's work alone which concerns us here.

Gall believed that physiology was, by far superior to anatomy--"structure," he would say, "tells us nothing about function." Nevertheless, when presenting his theoretical position to the public, he continually began with his anatomy,[101] and he spoke of anatomy under four different

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[100] All quotations from Gall hereafter unless otherwise noted are from the six volume English translation of his works by W. Lewis (n. 10). The designation "Gall-Lewis," followed by the volume number will hereafter refer to this work.

[101] E. H. Ackerknecht, & H. V. Vallois, Franz Joseph Gall, Inventor of Phrenology and his Collection (Madison, 1956), p. 13.

points of view:

> . . . of the anatomy of the brain, as a simple dissection or examination of the conformation of the brain; of the physiological and pathological anatomy of the brain; and of the comparative anatomy of the brain.102

He felt, however, that

> The first [of these] must necessarily be as barren in leading us to the discovery of cerebral functions, as the three others may be fruitful. But up to the present time [, he contended,] the physiology of the brain has received no advantage from anatomy, under any point of view whatever, for the simple reason, that no one has yet had the least idea of the nature of the functions of the brain; that is to say, not the least idea of the fundamental qualities and functions, which belong to the different parts of the brain.103

Gall was critical of the extirpation method as an approach to the study of cerebral function. "These cruel experiments," he felt, "are hardly ever conclusive."[104] He was, of course, referring to the type of experiment--if not the very experiments--conducted by Marie-Jean-Pierre Flourens (1794-1867) whose research was considered by some to have destroyed Gall's views, and, by others, to simply have reduced his impact (see n. 101). What were the means of determining "the fundamental qualities and faculties and the seat of their organs?" Gall listed nine methods.

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[102] Gall-Lewis, 3:87.

[103] Ibid.

[104] Ibid., p. 97.

The first method, according to Gall, is derived from "common language." He had always thought that the language habitually used by man to name the different propensities, sentiments and talents of men and animals "was a creation of the faculties of man, and that he [man] did nothing more than express by sounds, whatever took place within him."[105] In this first method, it is very likely that the "habitually used" terms were the ones used at that time by the Scottish school and which Gall may have picked up from them as Spoerl has indicated. For example, Thomas Reid's "self-preservation," "maintenance of habits," "hunger and thirst," and "lust" as "active powers" may have become Gall's instinct of generation--Zegunstrieb, or organe de l'amour, (or instinct venerien, see Appendix B).[106] As a modus operandi for discovering the seat of the fundamental faculties in the brain, Gall proposed that one seek out individuals who were considered to have this or that faculty or quality markedly developed, and examine the shape of their heads. If, as Gall was later led to believe, the individuals who had a particular faculty greatly developed all had a peculiar cranial shape, the inductive conclusion was reached that there must be a causative relationship (actually a correlational one) between that head shape and the presence of that faculty. We know now, of course, that

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[105] Ibid., p. 108.

[106] Spoerl, n. 88.

correlation does not imply causation; however, correlational data can, when a sufficient amount of variance is accounted for, allow for certain predictions between variables. Gall was led to believe as a result of his observations that particular head shapes were always (or almost always) associated with the development of particular faculties. Had he the statistical tools we have today to verify his observations, he may have reached different conclusions.

The second method, related to the first, and, actually an extension of it, is what Gall termed "counter proof." This involved seeking cases where a particular faculty or talent was notably absent; and, according to Gall, he found "more frequently" subjects which aided him by counter proof

> . . . than by positive proof, if not by the almost entire want of development of organs, at least by their inconsiderable development; for, heads of mediocrity [, he contended,] are as frequent, as those of genius are rare.[107]

The third method Gall proposed was derived from an examination of individual heads prior to knowledge of their outstanding propensities. When he encountered a particular "protuberance" or atypical skull shape, he attempted to learn in what respect this individual was endowed with some eminent faculty or quality.[108]

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[107] Gall-Lewis, 3:112.

[108] Ibid.

The fourth method involved the use of heads cast in plaster. Since it was not always possible to examine large groups of individuals having similar or totally dissimilar propensities, the use of plaster casts, it was argued, would resolve the difficulty. Gall tells us, that whenever he became

> . . . acquainted with any one, who possessed in an eminent degree any quality or faculty whatever, . . . [he] took a cast of his head. In order to have the entire form of it, . . . [he] shaved off the hair . . . or obtained precisely the external configuration of the head by feeling and measuring.[109]

and, finally, he states

> In a few years I thus formed a collection of four hundred casts, of men of all conditions and classes, from the beggar to the prince; the deaf and the dumb; idiots, children of all ages, boys, girls, women, etc.[110]

The catalogue of Gall's collection--numbering 354 items--has been published in the Ackerknecht and Vallois monograph (n. 101). As will be shown in a subsequent chapter, a similar collection was compiled in Boston subsequent to Spurzheim's visit, and that these collections, as a rule, were considered to be the "plaster proof" of phrenology's tenets.

The fifth method involved the collecting of human crania. Gall was aware that in the living subject "the muscles, the skin and the hair are so thick that it becomes

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[109] Ibid., p. 115.

[110] Ibid.

very difficult to judge with precision, of the protuberances of the cranium."[111] In later years, antiphrenologists would pick up on this point to support their criticism of phrenology's accuracy and contend, in addition, that Gall was not aware of the problem. Gall amassed a large collection of crania, a procedure which he realized "shocked" some--and worried many--but which he also felt eventuated in the richest collection to that date. The remaining four methods assisted Gall less, he has told us, than the preceding five in terms of their usefulness in "discovering the fundamental qualities and faculties,"--they were more useful, he felt, in "proving their discovery." The sixth method involved marking the external locations of faculties on the skulls and verifying the presence of external prominences on the skull by an examination of the "subadjacent cerebral parts."[112] The seventh method involved comparative anatomical observations on crania and brains of men and animals.

> Do you wish to distinguish the organ, which in man inspires the taste and talent for music? [Gall asks us, then] compare the head, or rather the external inferior angles of the forehead of a great musician, with the heads of the dog, the ape, the ox, and you will perceive that in these last, the parts of the cranium, and consequently, the cerebral parts placed underneath it, do not exist.113

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[111] Ibid., p. 116.

[112] Ibid., p. 120.

[113] Ibid., p. 126.

Gall rejected "violent mutilations" of the brains of animals as a legitimate method of discovering their function. However, the study of the effect of "accidental mutilations" in either men or animals--his eighth method--was considered acceptable; for,

> ... when, after the seat of an organ has been discovered by other means, and this discovery has been sufficiently proved, and this organ having been injured, there ensues any lesion of the faculty attributed to it, we may regard this phenomenon as a new proof. When, for example, the organ by means of which we possess the faculty of retaining names, has been injured by a bullet, and there follows from this an inability to recollect names . . . no one will suppose, that it is bad reasoning, to regard these facts as so many new confirmations.[114]

Gall felt that it was as a result of his labors that it became increasingly possible "to ascertain the laws according to which nature has disposed [the primitive radical powers and organs] . . . in the brain."[115] These laws, Gall felt, afforded him an "extremely philosophical" means of "assuming" and then "discovering" the fundamental powers. The ninth method was simply that the "succession and arrangement" of the organs proved their independence. Gall discusses this last method as follows:

> . . . I have never permitted myself to be influenced by reasoning a priori . . . I preferred to abandon myself entirely to my observations. The consequence was, that I sometimes discovered one fundamental quality or faculty, sometimes another, sometimes one organ, sometimes another. Whenever I believed that I had determined a primitive fundamental power, in whatever degree of activity, and I thought that I

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[114] Ibid., pp. 128-129.

[115] Ibid.

> had found the seat of his organ, I marked the place of this organ, and designated its form on the cranium. In this way of proceeding, I could follow no other order than that in which I made my observations. I defined, sometimes in one region, sometimes in another, the form of the organ that I had just discovered. Occasionally, I had the good fortune to seize at once, both the place and the form of an organ precisely. But sometimes, too, there has been so much vagueness in my first outlines, that I have been obliged to make a greater number of observations, better compared, in order to determine the seat or the form of an organ with more precision. From this has arisen the craniological chart, seized by the public with so much avidity; and since it was the only thing to the purpose which has appeared, it was thought that the whole tendency, and all the merit of the physiology of the brain were contained in this chart. Artists soon took possession of it, have executed it either well or ill, without ever consulting me, and have published a great number in all sorts of forms. This has determined us [Gall and Spurzheim] to make them more exact either on crania, or on plaster casts.116

In addition to Gall's basic assumptions that 1) "The moral and intellectual faculties are innate," 2) "that their exercise or manifestation depends on organization" [translated by Ackerknecht and Vallois as "their functioning depends upon organic supports," (n. 101)], 3) "that the brain is the organ of all the propensities, sentiments, and faculties," and, 4) "that the brain is composed of as many particular organs as there are propensities, sentiments, and faculties, which differ essentially from each other,"[117] the aforementioned methods led Gall to further conclude that

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[116] Ibid., pp. 129-130.

[117] Ibid., 1:55.

1. The qualities and the faculties, which are common to man, and the other animals, have their seat in those cerebral parts, which are equally common to man and brutes. Whenever, then, we are speaking of a quality or faculty common to beasts and man, we should seek its organ in the inferior posterior, the posterior inferior, or the anterior inferior parts of the brain. Of this number for example, are, the instinct of propagation, the love of offspring, the instinct of self-defense, that of providing food, the instinct of cunning, &c. [See Appendix B]

2. The qualities or faculties which man exclusively enjoys, and which form the barrier by which he is separated from the brute, have their seat in those cerebral parts which are wanting in animals, and we must consequently seek them in the anterior superior, and the superior anterior parts of the forehead. Of this number for example, are comparative sagacity, the metaphysical disposition to religious sentiments and ideas.

3. The more indispensable the qualities and faculties may be, the more do we find their organs placed near the base of the brain, or towards the median line. The first and the most indispensable of all the organs, that of the instinct of propagation, is placed nearest the base; then comes that of the love of offspring, &c. The organ of the sense of localities is more indispensable than that of the sense of tones, or that of numbers; and hence the two last are placed farther from the median line than the first. Then, the more a quality or a faculty is essential, the more it is necessary to seek its organ near the base of the brain, or the median line. The organs, that are less indispensable, are placed towards the top and sides of the head. If I wished to discover the organ of the talent for poetry, I should not, according to this principle, look for it either at the base, or near the median line of the brain.

4. That the organs of the fundamental qualities and faculties, which mutually aid each other, are also placed near each other; for instance, the organ of propagation and that of the love of offspring, that of self-defense and the carnivorous instinct, that of tones and of numbers. If there exist organs for the senses of order and of the measure of time, it is very probable that they will be found in the neighbourhood of that of the sense of locality, of tones, and of that of the sense of numbers . . . [and,]

5. The organs of the fundamental analogous qualities and faculties are also placed near each other. For example

> the organs of the relations of places, colors, tones, and numbers are placed in the same line, the same as the organs of the superior faculties, and those of the propensities of the inferior animals.118

Gall added to these observations his most controversial tenet to the effect that the external configuration of the skull is a fair representation of the internally contained brain, and, except in "cases of mental alienation, in chronic diseases. . . . old age and decreptitude" the external form of the cranium allows us to infer "a greater or less development of the cerebral parts."[119] A complete list of the twenty-seven faculties "discovered" by Gall is given in Appendix B which also includes their cranial and cortical localizations, and their names in German, French and English. For a critique of Gall's tenets see, for example, Ackerknecht and Vallois (n. 101).

Finally, credit for the following purely anatomical discoveries is given to Gall alone:

1. he developed an improved method of dissection, an improved technique, which, according to Ackerknecht and Vallois "was a consequence of his new way to consider the brain and spinal cord, which has become ours [n. 101]." While most of Gall's contemporaries sliced the brain as they would a ham, Gall was comparing the nervous system to a tree and sought to trace the fibers' course throughout its system;120
2. Gall first distinguished between the grey and white matter of the brain;

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[118] Ibid., 3:130-132.

[119] Ibid., p. 65.

[120] Ackerknecht & Vallois, p. 14.

3. he was the first to notice the swelling and segmentations of the spinal cord;

4. he was the first to notice in the medulla the nuclei of the cranial nerves--then typically called "cerebral" --and correctly described the origins of nerves 1, 2, 3, 4, 5, 6, 7, and 8;

5. he first noticed the two different kinds of fibers in the cerebellum, the "retrantes" (projection fibers) and "convergentes" (our association or commisural fibers)-- these observations explained the commissures of the brain;

6. Gall was the one who finally proved the crossing of the pyramidal tracts--thus explaining contralateral paralysis;

7. he "revealed the anatomical nature of the circonvolutions through his 'artifical unfolding' in which he was imitating the unfolding which occurs spontaneously in cases of hydrocephaly;"

and so on. A complete list of his discoveries has probably yet to be compiled. The above list, however, are definitely attributable to him and is based on the account of Gall's system by Ackerknecht and Vallois (n. 101). See their monograph for further discussion (and Hollander, n. 95).

Gall and the Behavioral Sciences

Apart from the traditional discussions of Gall as the personage who settled once and for all the question of the mind's locus, and apart from simply attributing to him the credit for inspiring research on cortical localization-- physiological psychology's predecessor--, there are various other aspects of his writings which are important to the history of the behavioral sciences. It is even fair to say that Gall's goals were not the purely anatomical ones for which he is given the most credit. For example, his physiology

and psycho-physiology (as Blondel has named it[121]) are completely intertwined in his work. In addition, he did not study mind in the traditional sense, but he did study mental phenomena. George Henry Lewes has perhaps summarized most cogently Gall's historical position in the field of psychology (to 1866)--Hollander[122] felt that to 1920, only Lewes had discussed Gall as a "psychologist." According to Lewes

> Gall may be said to have definitely settled the dispute between the partisans of innate ideas and the partisans of sensationalism, by establishing the connate tendencies, both affective and intellectual, which belong to the organic structure of man. Two psychological facts, familiar from all time to the ordinary understanding . . . were by Gall made the basis of a doctrine. The first of these facts is, that all the fundamental tendencies are connate, and can no more be created by precept and education than they can be abolished by denunciation and punishment. The second fact is, that man's various faculties are essentially distinct and independent, although intimately connected with each other . . . These two propositions have entered into the body of all European doctrines, although the corollary from the second [that the mind consists of a plurality of cerebral organs] is still vehemently disputed . . . Another conception systematized by Gall has also passed into general acceptance, namely the pre-eminence of the affective faculties over the intellectual; and the subdivision of the affective faculties into propensities and sentiments, and of the intellectual faculties into perceptives and reflectives; thus marking the progress in development from the individual to the social, from the

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[121] C. Blondel, La Psycho-physiologie de Gall: Ses Idees Directrices (Paris, 1914).

[122] Hollander, 1:230.

> sensuous to the intellectual, which constitutes the great progress of civilization in the triumph of sociality over animality.123

This is strange sounding psychology to say the least but it does indicate that quite early (1866) Gall was appreciated and viewed as an important figure in psychology's history. But he did more than Lewes has indicated.

Gall's contributions to the behavioral sciences in general include in addition to the above, the development of interest in and contributions to comparative psychology in which he discussed the mental development in animals and the evolutionary development of the nervous system from the lowest organisms to man. These ideas are discussed throughout his works. For example, in one place he tells us.

> . . . in order to attain the knowledge of man in all the parts which constitute his brain, all his propensities and talents, it is necessary to study the animals one after another, following the gradual march which nature has observed in the succession of their cerebral organs, and faculties . . . The brutes . . . share so many things with him [man], that the naturalist finds himself sometimes embarrassed to determine where animal life terminates, and humanity commences . . . One might almost be tempted to say . . . that except the religious sentiment, and the knowledge of God, there is no moral quality, and no intellectual faculty of which the animal kingdom, as a whole, does not share at least the first germs.124

123G. H. Lewes, The Biographical History of Philosophy From its Origins in Greece Down to the Present Day, Library Edition (New York, 1866), pp. 754-755.

124Gall-Lewis, 1:92-93.

Not only is this idea pre-Darwinian, but is suggestive also of the current very popular speculations of the ethologists such as Konrad Lorenz.

Gall has also had an interest in developmental processes. In Volume III of his final statement, for example, we find sections dealing with "the influence of the brain upon the cranium from birth to adult age," "coincidence of the surface of the brain with the external surface of the cranium, in mature age," and "of the influence of the brain on the form of the cranium in the decline of life."[125] In addition to the purely physical interests, Gall was also interested in their assumed concomitant behavioral variations throughout the life cycle.

In addition to these general interests, he also was influential in the general fields of ethnology, characterology--personality theory (see, e.g., Allport, n. 17) --, in anthropology, abnormal psychology and psychiatry. Hollander has devoted two chapters to Gall as a "psychologist" (Chapters XII and XXII), Boring, one, and Clarke and Dewhurst, to name just one additional recent work, devote slightly more than one chapter to phrenology in their richly illustrated An Illustrated History of Brain

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[125]Ibid., 3.

Function.[126] Many other authors could be cited here. The reader is again referred to Appendix A; for, additional aspects of Gall's theories will be returned to in the discussion of Spurzheim's views in the next chapter in order to distinguish how Spurzheim differed from his mentor.

It is the events subsequent to Gall's development of his theories, however, which are to be the major focus of this work. To those events we must now turn. Gall's major disciple, Johann Christoph Spurzheim, was the popularizer of Gall's views and the individual who was responsible for making known to the English speaking world these unique theories. It was Spurzheim also who visited Boston and provided the inspiration for the development of a society devoted to testing the truthfulness of phrenology's tenets. Before dealing with the organization and functioning of that society, however, we need to explore Spurzheim's unique contributions to phrenology's development, and the state of phrenology in America prior to his arrival in 1832. To Spurzheim and those events we will now turn.

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[126] Hollander, 1; Boring, n. 74, and E. Clarke and K. Dewhurst, An Illustrated History of Brain Function (Los Angeles, 1972). See also Ackerknecht & Vallois, n. 101, and on Gall's non-anatomical views D. Krech, "Cortical Localization of Function," in L. Postman, ed. Psychology in the Making (New York, 1968), pp. 31-72.

CHAPTER III

JOHANN CHRISTOPH SPURZHEIM: HIS LIFE, WORKS, AND UNIQUE THEORETICAL POSITION

Hic est Spurzheim, medicus, sophiceque sacerdos,
Qui cerebri partes omnes, arcanaque novit,
Atque facultates mentis, sedesque notavit,
Quique bono humani generis sudavit et alsit.
Noctes atque dies meditans, summoque labore,
Perficiens systema sui sublime magistri.[1]

Plaudits like the above were not uncommon when Johann Christoph Spurzheim died in 1832. At that time Charles Follen delivered a twenty-eight printed page "Funeral Oration" at the Burial of Spurzheim, John Pierpont wrote an "Ode" for the funeral which was sung "with great effect by the Handel and Haydn Society" of Boston,[2] Elizabeth Palmer Peabody commemorated his passing with her verses "Welcome of angels and

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[1]Inscription on a bust (by William Bally [London]) of Spurzheim written by the Marquis Moscati, quoted in N. Capen, Reminiscences of Dr. Spurzheim and George Combe: and a Review of the Science of Phrenology, from the Period of its Discovery by Dr. Gall to the Time of the Visit of George Combe to the United States, 1838, 1840 (Boston, 1881), pp. 43-44, trans. Rev. John Pierpont, in Ibid., p. 44. The bust was presented to William Sturgis for having erected a monument over Spurzheim's grave. See also "William Sturgis (1782-1863) . . . Merchant, Legislator," in F. W. Russell, Mount Auburn Biographies (Cambridge, Mass., 1953), p. 160, and A. A. Walsh, "The American Tour of Dr. Spurzheim," J. Hist. Med. All. Sci. 27 (1972):187-205. On the Marquis Moscati see Annals of Phrenology 1 (Boston, 1833):103 and H. S. Foote, Casket of Reminiscences (Washington, D. C., 1874), pp. 71-73. The latter source suggests that the Marquis was an "imposter."

[2]C. Follen, Funeral Oration Delivered Before the Citizens of Boston Assembled at The Old South Church, Nov. XVII at the Burial of Gaspar Spurzheim (Boston, 1832), p. 32, reprinted in The Works of Charles Follen With a Memoir of His Life, 5 vols. (Boston, 1841), 5:153-188, and Capen, pp. 39-40.

Farewell of men to the beloved Spurzheim,"[3] and the New England Magazine, which had published in their Volume 3 for October 1832 a vituperative poem referring to Spurzheim and his system (before his death) which began

> Great man of skulls! I must let loose
> My pen against you;--more's the pity,
> For surely you have played the deuce
> Among the noddles of the city.
> I wo'n't malignantly assail
> Your fame, and say you mean to joke us;
> But faith, I can't make head or tail
> Of all this mystic hocus pocus.[4]

wrote in Volume 4 for 1833 (after his death) that they (i.e., the Editor, Park Benjamin) "would not exchange, for the highest favors of the goddess of fashion, one of the golden hours we have spent with this philosophical and benevolent man."[5] The respect of the citizens of Boston and elsewhere which Spurzheim was able to generate was not universally felt. For, as the excerpt from the poem above indicates, some individuals did feel that he was a fraud. Be that as it may, it appears that those who respected him clearly outnumbered, and, in many cases outranked, those who did not and it will be the purpose of this chapter to discuss the man, the system, and the personality which was able to generate such controversy.

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[3]The original is in The Berg Collection, New York Public Library, cited in H. Schwartz, "Samuel Gridley Howe as Phrenologist," Amer. Hist. Rev. 57 (1952):645.

[4]"Boston Notions," New Eng. Mag. 3 (1832):397 as quoted in R. E. Riegel, "The Introduction of Phrenology to the United States," Amer. Hist. Rev. 39 (1934):75.

[5]"The Late Dr. Spurzheim," New Eng. Mag. 4 (1833):43; quoted also in J. D. Davies, Phrenology Fad and Science: A 19th Century American Crusade (Hamden, Conn., 1971), p. 19.

Birth and Parentage: 1776-1799

Biographical summaries of the life and philosophy of Spurzheim are numerous and of varied quality. Little is known, however, of his life and activities prior to his association with Gall in 1800.[6] In addition, the various phrenological periodical literature which appeared during the 19th and early 20th centuries simply told and retold

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[6]See, e.g., Capen, Follen, Nouveau Larousse Illustre s.v. "J. G. Spurzheim," and Allgemeine Deutsche Biographie, s.v. "Johann Christoph G. Spurzheim" (includes also a biography of Spurzheim's nephew, Karl G. Spurzheim). q.v. also H. Bruyères, La Phrénologie le Geste et la Philionomie Démontrés par 120 Portraits (Paris, 1847), pp. 493-516; N. Capen, "Biography of the Author [Spurzheim]," in J. G. Spurzheim, Phrenology in Connexion with the Study of Physiognomy (Boston, 1833), pp. 9-168; A. Carmichael, A Memoir of the Life and Philosophy of Spurzheim (Boston, 1833) (The only complete book on Spurzheim and his views to come to this writer's attention); [R. Chenevix] "Gall and Spurzheim--Phrenology" For. Quart. Rev. 2 (1828):1-59 (republished with notes by Spurzheim [Boston, 1833]); Encyclopaedia Britannica, 8th ed., s.v. "Johann Gaspar Spurzheim" by R. Cox; P. P. Howe, ed. The Complete Works of William Hazlitt, 21 vols. (London, n.d.), passim; Nouvelle Biographie General, s.v. "Jean-Gaspard Spurzheim"; Grand Dictionnaire Universel du XIX^{e} Siecle, s.v. "Jean Gaspard Spurzheim"; R. D. Owen, "Interesting People Whom I Met in London," Atlantic Mon. 32 (1873):560; The American Cyclopaedia, s.v. "Johann Gaspar Spurzheim" by G. Ripley and C. A. Dana, and [B. Silliman], "Obituary Notice of Dr. Gaspar Spurzheim," Amer. J. Sci. Arts. 23 (1833): 356-370. These sources do not exhaust the sources of biographical information on Spurzheim. In addition, they vary in length as well as in quality. The works of Capen, Carmichael and Follen are the most extensive. W. M. Williams, A Vindication of Phrenology (London, 1894) discusses Spurzheim's reception in England (pp. 328-340). Also see A. A. Walsh, Introduction to Observations on the Deranged Manifestations of the Mind, or Insanity, by J. G. Spurzheim (Gainesville, Florida, 1970), pp. v-xiv where I comment on the variation in Spurzheim's given names (p. xiv), and Walsh, "The American Tour."

earlier versions of his life. George Combe's manifold writings contain accounts of Spurzheim.[7] For example, his "Preliminary Dissertation on the Progress and Application of Phrenology," in the Transactions of the Phrenological Society Instituted 22D February 1820 (Edinburgh, 1824) gives us an account of the early years; and, Spurzheim himself comments on his early associations with Gall in some of his own works.[8]

Johann Christoph Spurzheim was born December 31, 1776 at Longvich, a village near Treves (now Trier), West Germany --a small town on the Moselle about sixty miles from the Moselle's confluence with the Rhine at Coblenz. His father was a farmer and with the assistance of the other members of his family he cultivated a farm of the rich Abbey of St. Maximin de Treves. The family were Lutherans and at one time, like Gall, Spurzheim was to pursue a theological career. It is known that there were at least four children in Spurzheim's family. A sister, Therese was married to Nicolas Hermsdorf of Schweick (near Treves) and at the time that Spurzheim's estate was settled (in 1834), after his death, she was a widow. A brother, Willibrod, became a watchmaker and moved to Oedenburg in Hungary. Another

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[7] On Combe see A. A. Walsh, "George Combe: A Portrait of a Heretofore Generally Unknown Behaviorist," J. Hist. Behav. Sci. 7 (1971):269-278.

[8] e.g., Essai Philosophique sur la Nature Morale et Intellectuelle de l'homme (Paris, 1820), pp. 210-245.

brother Charles became a "Master Sadler" in Vienna.[9] One of his brothers had a son Karl, who became a physician of sufficient import to have his biography included in the Allegemeine Deutsche Biographie immediately following that of his much more well known Uncle Johann. Furthermore, in F. B. Sanborn's Memoirs of Pliny Earle, M.D. (Boston, 1898) he states that a cousin of Spurzheim's was in 1849 an eminent leader in psychiatry at Vienna--he may have been referring to Spurzheim's nephew (p. 164).

Spurzheim acquired the first rudiments of Greek and Latin in his native village and added Hebrew to his linguistic skills when he matriculated at the University of Treves in 1791. Later in life (c. 1813) he would master English--in only six months we are told--and contribute greatly to the dissemination of the novel doctrines he was yet to embrace. He was now (1791) in his fifteenth year. Carmichael tells us that while at Treves Spurzheim studied divinity and philosophy, and, Follen stated that he "was destined, by his friends, for the profession of Theology".[10]

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[9]Walsh, "The American Tour," p. 204. In 1847, when George Combe visited Spurzheim's relatives at Treves he learned that there were four sons in Spurzheim's family--"Francis, who died at Treves; Caspar, the doctor [J. C. Spurzheim]; John Joseph, who was believed to have died at Vienna, and another, whose name was forgotten . . . a sadler [Willibrod]." Where Charles fits in we do not know. The names I have mentioned all shared in Spurzheim's 1834 estate, C. Gibbon, The Life of George Combe, 2 vols. (London, 1878), 2:252.

[10]Carmichael, p. 3; and Follen, 1841, p. 156.

The whole of Europe was in turmoil during the 1790's. Leopold II, the brother of Marie Antoinette--"the suffering qween of France"--, died suddenly in Vienna in 1792 and was succeeded by his son, the "last Holy Roman Emperor," Francis II (1792-1806)--later the first Emperor of Austria (Francis I, 1804-1835). At this point in time, due to the turmoil in France, Francis II was immediately faced with "the imminent danger of war." According to Dill, on April 20, 1792, "The French Assembly forced the reluctant Louis XVI to declare war on Austria . . . and some days later on Prussia too." Thus a period of almost twenty-five years, of terrible warfare, Dill tells us, began.[11] From 1796-1799 various skirmishes occurred in Austria notably as a result of the aggression of Napoleon. The reader will recall that it was in 1796 in Vienna that Gall began his lectures, and in 1798 published his letter to Herrn. Joseph Freyherrn von Retzer on his new theories (see Appendix A). In addition, it was as a result of events which occurred in Vienna during the 1790's that Gall's views were prohibited expression in Austria after 9 January 1802--the day the Austrian Government (Francis II) issued an edict prohibiting all private lectures without special permission. Combe has published a translation of Gall's account of this in On the Functions of the Cerebellum, By Drs. Gall, Vimont and Broussais (Edinburgh, 1838). Other statements related to

[11] M. Dill, Germany: A Modern History (Ann Arbor, Michigan, 1970), pp. 70-71.

these events appear in Gibbon, Hollander, and Fowler.[12] I mention these events here since there is some question as to when Spurzheim actually moved to Vienna during this period. Carmichael has stated that

> In 1792 the republican armies of France overran the south of Germany, and seized upon Treves . . . [; and, that] Spurzheim retired to Vienna, where he was received into the family of Count Splangen, who entrusted to him the education of his sons.13

This is a possibility according to Dill's account of this period; but, Combe states

> [Spurzheim] was destined by his parents to become a Clergyman, but in 1799, when the French invaded that part of Germany [Treves], he went to Vienna to study Medicine, where he became acquainted with Gall;14

This is also a possibility; however Follen has indicated that

> Young Spurzheim received his classical education at the college of Treves . . . [however,] in consequence of the war between Germany and France, in 1797, the students of that college were dispersed, and Spurzheim went to Vienna. Here he devoted himself to the study of medicine.15

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[12]Gibbon; B. Hollander, In Search of the Soul and the Mechanism of Thought Emotion and Conduct, 2 vols. (London, [1920]); and J. Fowler, Life of Dr. Francois Joseph Gall (New York, 1896), pp. 28-30. The letter from Francis II is reproduced in M. Neuberger, "Briefe Galls an Andreas und Nannette Streicher," Archive f. Gesch. Med. 10 (n.p., 1917):57.

[13]Carmichael, p. 3.

[14]G. Combe, "Preliminary Dissertation on the Progress in Application of Phrenology," in Transactions of the Phrenological Society Instituted 22D February 1820 (Edinburgh, 1824), p. 11.

[15]Follen, 1841, p. 156.

Thus we are unable to determine exactly when he moved to that city by a perusal of these early accounts of his life. Since there were many skirmishes between France and Austria during this decade, any of them could have been the one referred to by these biographers as the event which precipitated Spurzheim's move. Spurzheim does not give us a clue and, since all later accounts repeat the earlier statements, the exact date of his move for the nonce, is undeterminable. This writer's perusal of a great many accounts, however, leads him to accept Combe's 1799 date as more authoritative--Combe was a more intimate correspondent with Spurzheim than the other authors which were cited were. Combe, therefore, would have had a greater opportunity for verification of such facts. In any event, we do know that Gall had been lecturing for at least four years prior to Spurzheim joining him as a pupil in 1800.

Spurzheim and Gall: 1800-1813

Gall had been lecturing in Vienna for four years when he was joined by the youthful twenty-three year old medical student, Spurzheim. In addition to the general attention Gall received subsequent to beginning his lectures in 1796, some very early accounts of his views were contained in his letter to Retzer (previously mentioned), in the accounts of L. F. Froriep (see Appendix A) which had reached second and third editions in 1801 and 1802 respectively, in the work of Martens (Leipzic, 1802), and in that of Walther (Zurich, 1802). Spurzheim tells us that

> En 1800, j'assistai, pour le première fois, à un cours que M. Gall répétait de temps en temps a Vienne depuis quatre ans. Il parlait alors de la nécessité du cerveau pour les manifestations de l'âme, de la pluralité des organes et de la possibilité de connâitre le develloppement du cerveau par la configuration extérieure de la tête. Il indiquait plusieurs organes particuliers pour différentes mémoires et pour plusieurs sentimens; mais il n'avait pas encore commencé a examiner la structure du cerveau. Depuis 1800, jusqu'on 1804, il a modifié la partie physiologique comme il l'a professe au commencement de nos vogages [to be discussed].16

There was apparently always some question of Spurzheim's relationship to Gall during these early years. Spurzheim

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16 G. Spurzheim, Observations sur la Phraenologie, ou la Connaissance de l'homme Moral et Intellectuel, Fondée sur les Fonctions du Système Nerveux (Paris, 1818), pp. xviii-xix.

wished to set the record straight by clarifying the fact that he was an "auditor" at Gall's lectures and an assistant. As he stated two years after the above quoted remark

> . . . j'ai été simplement un auditeur de M. Gall jusqu'en 1804, époque où je lui fus associé. Depuis lors ma condition de simple auditeur a cessé. Cependant je reconnais, avec gratitude qu'il m'a fourni pendant long-temps de fréquentes occasions de profiter de ses lumières; mais je me flatte d'avoir contrubué aussi à augmenter ses connaissances.[17]

In these early years (1800-1804) Gall was assisted not only by Spurzheim but by another student of whom little is known other than that he was named Niclas,[18] and, in regard to Gall's anatomy at this time Spurzheim has indicated that he (Gall)

> . . . parlait, dans l'anatomie, du décroissement des pyramides, de leur passage à travers le pont de Varole, de onze couches de fibres logitudinales et transversales dans le pont, de la continuation du nerf optique jusqu'à la paire extérieure des corps quadrijumeaux, des faisceaux divergens à l'extérieur des cuisses du cerveau, au-dessous du nerf optique, dans la direction que Vieussens, Monro, Vicq-d'Azir et Reil (1) [Gren's Journal 1 (1795):102] avaient suive, le premier en reclant et les autres en coupant le cerveau. [In addition,] M. Gall montrait encore la continuation de la commisure anterieur à travers les corps striés, et il parlait du deplissment du cervea[u] dans les hydrocéphales . . .[19]

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[17] Spurzheim, Essai Philosophique, p. 213.

[18] E. H. Ackerknecht and H. V. Vallois, Franz Joseph Gall, Inventor of Phrenology and his Collection (Madison, 1956), p. 8

[19] Spurzheim, Observations, p. xix.

It is generally conceded that Spurzheim "helped"[20] Gall in his anatomical studies during the years 1800-1804. Although Gall's work in anatomy is well established, it is perhaps more correct to state that, although Gall was the original investigator, Spurzheim played no small part in the development and clarification of those original ideas. "Des le commencement," wrote Spurzheim in 1818.

> je sentis beaucoup d'attraits pour la doctrine du cerveau, et depuis l'époque ou j'en ai pris connaissance pour la première fois, je ne l'air plus perdu de vue. Aqant fini mes etudes en 1804, je me réunis à M. Gall pour poursuivre particulièrement la partie anatomique.21

Although Spurzheim did not actually receive his medical degree until 1813--and did not publish his thesis until 1821--, as he stated above, he viewed his studies as complete in 1804. Thus, during his entire association with Gall (1800-1813) he remained a student-colleague without credentials--i.e., without the M.D. degree. This state of affairs may have prompted him to either 1) overstate the magnitude of his contributions to the fundamental tenets which were developed in common with his mentor--thus hopping on the proverbial "band wagon" of imminent fame, or 2) state his contributions factually and claim for himself the credit he deserved--credit which may have been all too slow in coming, working as he did in the all too well known shadow of his master.

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[20]Akcerknecht and Vallois, p. 8.

[21]Spurzheim, Observations, p. xx.

Gall certainly felt that Spurzheim was deserving of credit; for, he did include Spurzheim's name in the title of his Recherches sur le Système Nerveau en Général (Paris, 1809), in the title of the first two volumes of his four volume opus Anatomie et Physiologie du Système Nerveaux en Général (Paris, 1810-1819), and as joint author of Des Dispositions Innées de l'âme et de l'ésprit (Paris, 1812). By the time Gall published his final statement however, Sur les Fonctions du Cerveau et sur Celles de Chacune de ses Parties, 6 vols. (Paris, 1825) Spurzheim's name was omitted from the title page; but, as was mentioned in the previous chapter, Gall did state in the advertisement to that work (1835 English translation, see Appendix A)

> When I speak in the plural number [throughout this work], I include with myself Dr. Spurzheim, who, having accompanied me in my travels, made a great part of the observations referred to in common with me [Italics mine].22

On 5 March 1805, the day on which Spurzheim and Gall left on their European tour (discussed below) Gall is said to have told Spurzheim "Il faut que nous revenions, l'un et l'autre, avec honneur, vous . . . [Spurzheim] comme Anatomiste, et moi . . . [Gall] comme Physiologiste."23 Spurzheim has stated that he did all the dissections during their various travels, although Hollander--who was clearly biased in favor of Gall, contends that Spurzheim was simply a "prosector,

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[22] 1:56 (see n. 10, Chapter II).

[23] Spurzheim, Essai Philosophique, p. 212.

secretary and general assistant" and that no mention is made of Spurzheim in the early accounts of their tour.[24] Spurzheim relates his position at that time thusly:

> J'ai fait la dissection du cerveau dans tous les cours que M. Gall a donnés pendant nos voyages . . . [; and, quotes Gall to the effect that the two of them] quitté Vienne, en 1805, pour voyager et pour suivre en commun les recherches qui avaient pour but l'Anatomie et la Physiologie de tout le systeme nerveux [; and, states, that Gall acknowledged Spurzheim as a collaborator when he stated] J'aurai donc . . . depuis que je l'ai associé à mes travaux, cessé de penser [sic].25

Spurzheim continued his defense of his historical position in the writings from which the aforementioned quotations in French were taken. He defends himself, e.g., against what he terms Gall's charges of plagiarism--Gall accused him of having "copie ses propres ouvrages."[26] In any event, the defense referred to was not necessary during the early years when Gall and Spurzheim collaborated, and their relationship seems to have been a friendly and productive one (they were separated in 1813--although they were almost reunited near the time of Gall's death in 1828). I have referred to the "tour," the "travels" etc. that Gall and Spurzheim conducted in common. To those events we will now turn. It has already been mentioned that Gall's Vienna lectures were prohibited in 1802. From that period until the two began their travels, it appears that Gall was allowed to have a small private class which included Spurzheim. In 1805, the two decided

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[24]Hollander, 1:340.

[25]Spurzheim, Essai Philosophique, pp. 212-213.

[26]Ibid., p. 213.

to leave Vienna. According to some writers, not only was Gall forbidden to teach at this time, but he was also forbidden to publish.[27] Others, however, were allowed to publish accounts of his lectures.

On 1 January 1805 Gall received word from his father who was at that time still residing in Tiefenbronn in Baden. His father wrote, "It is late, and night cannot be far distant; shall I see you once more?" Gall tells us that

> Nothing but such an invitation, joined with the ardent desire which I cherish of again seeing my beloved parents after an absence of twenty-five years, could have induced me to leave my friends and my patients for a few months. I wished also to avail myself of this opportunity to communicate my discoveries to the learned men of the North of Germany. That my interview with them might not terminate in propositions and discussions without proof, I took with me part of my collection.[28]

The trip which Gall had envisioned as lasting but a "few months" took him and Spurzheim on a two year tour "to every intellectual center in Germany, Switzerland, Holland and Denmark."[29] The two left Vienna on March 6, 1805 and, after a brief visit to Gall's parents, arrived at their first stop, Berlin, where they remained from 18 March to the end of April at which time they proceeded to Potsdam during the first half of May.

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[27]Ackerknecht and Vallois, n. 23, p. 9.

[28]Fowler, pp. 37-38.

[29]Ackerknecht and Vallois, p. 9.

The remaining itinerary of our peripatetic theorists was as follows:

1805.	Leipzic,	from	23d May	till	13th June.
	Dresden,	"	14th June	"	3d July.
	Halle		8th July		28th July.
	Jena	"	1st August	"	7th August.
	Weimar,		7th August		18th August.
	Goettingen,		21st August		31st August.
	Brauerschweig,		5th September		13th Sept.
	Copenhagen,		24th September		6th Nov.
	Kiel,		13th November		1st Dec.
	Hamburgh,	"	4th December	"	1st Feb. 1806.
1806.	Bremen,		3d February		18th February.
	Münster,		21st February		19th March.
	Amsterdam,		25th March		25th April.
	Leyden,		25th April		4th May.
	Dusseldorf,		9th May		21st May.
	Frankfort,	"	27th May	"	6th June.
	Würtzbourg,		23d July		12th August.
	Marbourg,		14th August		25th August.
	Stuttgard,		8th October		19th October.
	Carlsruhe,		28th November		26th Dec.
	Lastall,		26th December		1st Jan. 1807.
1807.	Freybourg en Brisgaw,	"	2d January	"	16th January.
	Doneschingue,		16th January		23d January.
	Heidelberg,		28th January		13th February.
	Manheim,		19th February		6th March.
	Munich,		27th March		31st May.
	Augsbourg,		31st May		25th June.
	Ulm,	"	28th June	"	11th July.
	Zurich,		15th July		2d August.
	Bern,		8th August		5th September.
	Bale,		7th September		24th Sept.
	Muhlhause,		24th September		2nd October.
	Paris,		November		--30

The tour was a great success. Courses were delivered, learned men visited, prisons and hospitals attended and so on. "Sharp criticism," however, wrote Ackerknecht and Vallois, "was directed at . . . [Gall's] procedures, his public courses for which he was paid. He was accused of charlatonism and greed."[31] Outlines of his lectures in Berlin were published

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[30]Combe, p. 13.

[31]Ackerknecht and Vallois, p. 9.

by Ernst Bischoff (1781-1861, see Appendix A) with notes by C. W. v. Hufeland; and, a translation of that work, according to Hollander, was published in London in 1807--although I have been unable to verify this.[32] The Edinburgh Medical and Surgical Journal (15 [March, 1806]) gave the following account of the Berlin visit:

> The craniology of Dr. Gall was the favourite topic of the German literati during the summer of 1805 at almost every university and capital of the Northern Provinces of Germany . . . . In the beginning of last spring the doctor set out for Berlin, and lodged in the house of his intimate friend, Mr. Kotzebue. He there met with universal acceptance. The King, the Queen, princes and princesses, interested themselves so much in his discoveries that he obtained an invitation to go through a course of lectures in presence of the Royal Family, during which the Queen inspected the dissection of a human brain, while the doctor demonstrated the whole series of his astonishing discoveries. . . . A rancorous attack was now commenced against his theory by Dr. WALTER, leading anatomist in Berlin, but it failed of the intended effect, every person being convinced that he was dictated by envy. On the opposite side, the justly renowned Dr. HUFELAND, first physician to the King, almost all the faculty, as well as others professed their full assent, and several interesting tracts were published, in which ample justice was done to the theory . . . Dr. Gall visited the houses of correction and prisons in Berlin and Spandau, and gave the most convincing proofs of his ability to discover, at first sight, such malefactors, thieves, and men of particular talents as were amongst the convicts and prisoners. At Torgau, where he also visited a house of correction, Professor BOTTIGER accompanied him, who afterwards published Gall's observations, an abstract of which is given in this article;[33]

and, to this account Hollander adds

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[32]Hollander, 1:325.

[33]Ibid.

> The visit referred to by the above correspondent was that to the prisons of Berlin and Spandau. The former was visited by Gall on April 17th, 1805, in the presence of the chief of the establishment, of the heads of the criminal department, and various counsellors selected by the Prussian Government. It was the first official test of the truth of his doctrines and their application to the detection of criminal and other dispositions. Gall saw two hundred prisoners, and described not only the nature of the crime, whether murder, theft, fraud, etc., for which each one was detained, but in many of them the special natural characteristics for which they were known to authorities and their companions. On April 20th he went to Spandau, accompanied by C. W. v. HUFELAND (1762-1836), one of the most celebrated philosopher-physicians of his time, like Abernethy in England. Four hundred and seventy heads were submitted to inspection. These visits by Gall to the prisons of Berlin and Spandau attracted much notice throughout Germany.[34]

But not all the reports of Gall's visits were favorable. Johann Gottlieb Walter (1734-1818, cf. supra) in his brochure entitled "Etwas ueber Herrn Dr. Gall's Hirnschaedellehre," gave the following comments on Gall's visit to the Berlin prisons:

> With great ease Gall differentiated the more distinguished thieves from those less dangerous, and in every case gave a description which tallied with the record of the trial of the prisoner. The disposition to thieving was most marked in the prisoner Columbus, and amongst the youths in the head of little H_____, with reference to whom Gall advised that he should be kept in prison for life, as he will never be anything else than a "good-for-nothing." In both cases the acts of the trial showed an abnormally active disposition to thieving. What man of feeling for morality and religion will be able to read this without amazement? A fanatic advised the perpetual internment of a child, which has stolen once and is supposed to have an imaginary organ of thieving. Mankind

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[34] Ibid.

> must revolt when it hears that a preacher of fatalistic theories promulgates teaching which would be abhorred even by the most savage people without morals and religion. And shall nations accept them who believe in Christ and revere His preaching of charity? And we fill the pockets of such a man and engrave medals in his honour! It is lucky for Berlin that Dr. Gall held his Fatalism Sermon in the presence of intelligent and just judges; in any other place it might have had dangerous consequences.[35]

According to Ackerknecht and Vallois, Gall emerged victorious from his confrontation with Walter as he did with similar confrontations with Stefan in Halle and Ackermann in Heidelberg (see Chapter II and Gall's reply to Ackermann listed in Appendix A).[36] Hufeland, who was prepossessed against Gall before hearing him, became a "convinced partisan" after they met. He has stated that

> It is only necessary to have eyes, and to open them, to be convinced of what Gall demonstrated concerning the dissection of the nerves, the crossing of the pyramids, etc. In order to see the structure, the brain must be dissected after Gall's method, following the parts from below upwards through all their ramificatons. [Curiously, with regard to the very quickly acknowledged discovery of there being two distinct sorts of nerves, one going to the circumference of the brain, and the other returning, and these two sets being always found together (nerves of sensation and motion), Hufeland expresses his want of faith. He continues:] It is with great pleasure and much interest that I have heard this estimable man himself expound his new doctrine. I am fully convinced that he ought to be regarded as one of the most remarkable phenomena of the eighteenth century, and that his doctrine should be considered as

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[35] Ibid., p. 326.

[36] Ackerknecht and Vallois, p. 9.

> forming one of the boldest and most important steps in the study of the kingdom of nature. One must see and hear him to learn to appreciate a man completely exempt from prejudice, from charlatanism, from deception, and from metaphysical reveries. Gifted with a rare spirit of observation, with great penetration, and a sound judgment--identified, as it were, with nature--becoming her confidant from a constant intercourse with her--he has collected, in the kingdom of organised beings, a multitude of signs and phenomena which nobody had remarked till now, or which had been only superficially observed. He has combined them in an ingenious manner, has discovered the relations which establish analogy between them, has learned their signification, has drawn consequences and established truths, which are so much the more valuable that, being based on experience, they emanate from nature herself. He ascribes his discoveries solely to the circumstance of his having given himself up ingenuously and without reserve to the study of nature--following her in all the gradations, from the simplest result of her productive power to the most perfect. It is an error, therefore, to give this doctrine the name of a system, and to judge of it as such. True naturalists are not men to form systems. Their observations would not be sufficiently accurate if they were prompted by a systematic theory, and realities would not square with the various limits of their notions. Hence, the doctrine of Gall is not, and cannot be, anything except a combination of instructive natural phenomena, of which a part consists at present only of fragments, and of which he makes known the immediate consequences.[37]

Two medals were struck in Gall's honor in Berlin, but his greatest triumph--alluded to in Chapter II--was that he gained the friendship of Goethe who, Ackerknecht and Vallois state, "followed assiduously [Gall's] . . . courses in Halle, Jena and Weimar." Further accounts of this European tour are given in Carmichael and Capen.[38]

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[37]Hollander, 1:327.

[38]Ackerknecht and Vallois, p. 9; Carmichael, and Capen.

Gall's theories were not unknown in Paris when he and Spurzheim arrived late in 1807. J. B. Demangeon had published an account of his views in 1806 (Paris, see Appendix A) after having attended Gall's lectures in Germany. Furthermore, there is a manuscript extant by Lamarck (at Harvard) in which he discussed Gall's system. It is in the form of a lecture which authorities believe may have been delivered at the Museum d'Histoire Naturelle between 1798 and 1806 (see Lamarck, Appendix A). But, if the French were theater-lovers, they had a more unique exposure, to Gall in the form of a "comedie-vaudeville" written and produced by Augustin Prevost (1753-1830) entitled La Cranomancie, ou le Docteur Mani-crane à Paris and presented to the public "à Paris, le Lundi 18 Frimaire an XIV (9 Decembre 1805)."[39] Prevost, who described himself as an

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[39]Prevost is rather an obscure personage. The following brief biographical sketch is taken from the Nouvelle Biographie Générale, s.v. "Prevost," it states "Prevost (Augustin), acteur et auteur dramatique francais, né en 1753, a Paris, où'il est mort, le 1er aout 1830. Il était filleul ou peut-être fils naturel du prince de Conti, qui pourvut a son éducation. S'etant engagé dans une troupe de comédiens nomades, it parcourut longtemps la province, et succéda en 1795 a Salé dans la direction d'un des petits théâtres du boulevard du Temple, à Paris; il lui donna le nom de Théâtre sans pretention (aujourd'hui les Délassements comiques). Outre les chefs-d'oeuvre du répertoire classique, il y fit jouer beaucoup de pièces et de mélodrames de sa composition, assez médiocres, et dont une vingtaine ont été imprimés. Son théâtre ayant été compris dans le décret de 1807 qui ferma la majeure partie des petits spectacles, Prevost se montra inconsolable d'une measure qui le réduisait à la misère. "Cet homme m'a bien trompé, disait-il en parlant de Napoléon; nous verrons où le conduira le grand coup d'État qu'il vrient de faire." En 1820 il montrait une lanterne magique dans le jardin Marbeuf. Brazier, Hist. des petit théâtres de Paris.--Wuerard, France litter [sic]."

"Artiste dramatique" was the director of a small French Theater known as the "Theatre Sans-Pretension." The characters in his "comedie-vaudeville" included, e.g., "Le Docteur, parlant avec l'accent allemand"--played by Prevost himself--, "M. Credule, bourgeois de Paris," "M. Incredule, homme caustique," and several others. The satire in this work would be considered mild by today's standards (although today, someone as radical as Gall was then might go completely unnoticed). Dialogue is included which indicates at least a superficial understanding of what Gall's views were. For the most part, however, Gall is depicted in a way very comparable to the later phrenologists--i.e., examining heads for large fees. The following brief dialogue occurs between Gall (i.e., the characterization of Gall) and the character M. Credule:

SCENE VIII

LE DOCTEUR, CREDULE

CREDULE

Monsieur, j'ai bein l'honneur do vous saluer, sans jamais avoir eu le plaisir de vous voir, je vous ai reconnu tout de suite sur le portrait que l'on m'a fait de vous; les journaux ne mentent jamais, l'on vous a dépeint comme un homme extraordinaire, et je suis assuré par moi-meme de la vérité du fait; je viens donc monsieur sur le bruit de votre renommée vous offrir ma tête, et vous en pourez faire ce que vous voudrez.

LE DOCTEUR

Je fais pas des têtes, je parle avec. Vous il veut savoir la faculté du vôtre, je dis toute suite; je prend à vous l'argent comme vous êtes riche, avez-vous un bon revenu.

CREDULE

Monsieur, je suis marchand.

LE DOCTEUR

Vous il marche, à quel endroit? pour une affaire?

CREDULE

Je veux dire que je vend plusieurs marchandises d'Allemagne.

LE DOCTEUR

Vous allemand?

CREDULE

Non monsieur, je suis francais, je me nomme Credule.

LE DOCTEUR

C'est fort bon, il faut toujours croire ce qu'on dit à vous, voulez-vous vous mettre dans la fauteuil?

CREDULE

Est-il besoin que je sois assis pour que vous voyez ma tête?

LE DOCTEUR

Je demande à vous l'argent que vous avez.

CREDULE

Dites-moi ce qu'il vous faut.

LE DOCTEUR

Donne toujours, je dirai assez quand vous aurez donné.

CREDULE

Monsieur, voila une pièce de vingt francs.

LE DOCTEUR

It estre bien petit.

CREDULE

Mais monsieur elle est d'or.

LE DOCTEUR

Je connais pas autrement, combien if faut comme ca pour avoir une carosse.

CREDULE

Monsieur, l'on en donne deux comme cela, mais en argent, pour faire une course.

LE DOCTEUR

Allons donne encore, in, sué, traie fir, encore, fir et ine fait fimf.

CREDULE

Monsieur, je n'entend pas l'allemand.
LE DOCTEUR, il marque avec ses doigts.
Regarde ma doigt, in sué traie fir.

CREDULE

Je vois bein que vous me montrez quatre doigts.

LE DOCTEUR

Ia quatre.

CREDULE

Cela fait quatre-vingt franc.
LE DOCTEUR, montrant la piece.
Et celle-ci fimfe, cest, onte.

CREDULE

Cela fait cent francs.

LE DOCTEUR

Ia, cent francs . . . (M. Crédule lui donne encore quatre pieces.)

LE DOCTEUR

Asteur, approache vous ote le perruque.[40]

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[40] A. Prevost, La Cranomancie, ou le Docteur Mani-crane à Paris (Paris, 1805), pp. 11-12.

The theme of the story is one in which the German doctor (Gall) shrewdly manages to avoid marrying an innkeeper's daughter (an innkeeper who thought that "Le docteur" could marry his daughter and set up shop in his hotel examining heads for a fee) by the use of reverse psychology (or reverse phrenology). The story is resolved when the daughter marries her real lover, and ends with complimentary final comments, directed to Gall. "L'incredule," for example, says to "Le docteur" in the final scene "Monsieur le docteur pense très bien; monsieur, employez toujours votre science aussi utilement, et vous serez l'homme le plus nécessaire à la societé . . . "[41]

Upon arriving in Paris, Spurzheim and Gall delivered their first course of public lectures in that city. Richard Chenevix who attended these lectures "with intense interest" gave these views of those events:

> His [Gall's] assertions [in these lectures] were supported by a numerous collection of skulls, heads and casts; by a multiplicity of physiological facts. Great, indeed, was the ardour excited among the Parisians by the presence of the men, who, as they supposed, could tell their fortunes by their heads, as well as Mademoiselle le Normand could do with a pack of cards; and chiromancy was abandoned for cranioscopy. Everyone wanted to get a peep at the necromancers; everyone was anxious to give them a dinner or supper; and the writer of this article actually saw a list on which an eager candidate was delighted to inscribe himself for a breakfast, distant only three months and a half; at which breakfast he sat a wondering guest. But this was nearly all the harvest which Phrenology reaped in Paris . . .[42]

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[41]Ibid., p. 24.

[42][Chenevix], p. 16.

Early in 1808 our two peripatetics began preparation of their conjoint memoir which was presented to the Institut de France on 14 May 1808. At this point in time Gall had planned to remain in Paris for about a year; however, with the exception of one unsuccessful excursion to England in 1823, he remained there until his death (1828). Ackerknecht and Vallois, among many authors, have given an account of this period of time (n. 18). We know that Gall established himself as a physician and developed a lucrative practice. We know also that the report on their memoir by the commissioners of the French Institute was negative and the chagrinned authors published it in its entirety in 1809 with answers to the commissioner's objections. Spurzheim must have occupied his time during this period by assisting Gall, perhaps writing conjointly with Gall the memoire referred to and, perhaps preparing for the publication for their conjoint magnum opus the first volume of which appeared in 1810. In 1808, it should be realized, Spurzheim was thirty-one years of age and had not yet been awarded the M. D. degree. When in 1826 he published his own Anatomy (London) since, as he stated, "Our large work is too expensive for the generality of medical students,"[43] he indicates what his activities must have been during the year 1809. In the preface to this w[illegible] he states his reasons for publishing a new volume. After [illegible]ntioning that he has continued his

[43]J. G. Spurzheim, The Anatomy of the Brain with a General View of the Nervous System, 1st Amer. ed. (Boston, 1834), p. xviii.

anatomical studies since his early days with Gall, he states

> I have . . . copied [in this work] some passages from the first volume of the large work [Anatomie et Physiologie du Systeme Nerveux] . . . and also given reduced drawings of several of the plates; because I think I have acquired the right to this volume, by its publication in our joint names, by my discoveries that form its principal object, and by all I did in furtherance of its publication. All the drawings were executed under my superintendance from anatomical preparations made and determined by me: The engraver worked by my directions: no plate was sent to press without my approval: The descriptions of the plates, and anatomical details are mine; and I furnished the literary notices in regard to the nerves of the abdomen and thorax, to those of the spinal column, of the five senses, of the cerebellum, and of the brain [Italics mine].44

To attempt to untangle the individual contributions of these two men to the anatomy as represented in their early conjoint writings would be beyond the scope of this writing. If, however, Spurzheim's statement is only fractionally correct--i.e., if it is a partially true statement of his involvement in the Anatomie--this would be sufficient to account for his time during that period. Volume II of the Anatomie did not appear until 1812 (Paris) and this is the last volume on which both Gall and Spurzheim's name appear--the third (1818) and fourth (1819) volumes bear Gall's name alone. Around 1812, Gall and Spurzheim became increasingly less friendly and cooperative. One might speculate that Spurzheim was becoming tired of being thought of as being only in a secondary position to Gall--

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[44]Ibid., pp. xviii-xix.

he was still receiving notice only as a junior author. Another medal was struck honoring Gall in Paris, and his medical practice brought him in contact with wealthy and influential people. These events and this state of affairs must have been perturbing to Spurzheim--a man who felt that the anatomical discoveries were his--or, as one gathers from some of his remarks, "his alone." It was not until 1813, however, that the two men parted company, never to have direct contact again.

On a la bosse du travail, de l'amour, etc. The French say today, meaning that one has the bump of (literally), i.e., the gift of, or propensity for, work, love and so on. In Spurzheim's case, one can specifically say Il avait la bosse de l'ecrivain, un don pour publier, ecrire (des livres), et faire des conferences; for, from the time Spurzheim left Gall in 1813 to 1832 he became one of the most well known published author-lecturers in England (especially), France, and, later, America.

"From [1804] . . ., "Spurzheim wrote, when he became Gall's colleague, "we continued laboring in common until 1813, when our connexion ceased, and each began to pursue the subject [the anatomy and physiology of the brain] for himself."[45] Little is known about the nature of the dispute which Gall and Spurzheim had at this time (1813). It has traditionally simply been referred to as "some disagreement." Spurzheim, who felt that Gall's insights needed elaboration --i.e., they needed to be presented in a "more philosophical" manner may have precipitated the break. In 1826 he had written

> The works which Dr. Gall has published in his own name, fix the extent of his phrenological knowledge. My ideas are developed in my own publications: history will assign

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[45]Spurzheim, The Anatomy, p. xiv.

> to each of us his share in the works that have been issued under our joint names.[46]

Earlier than this however, in the "Preface" to his The Physiognomical System of Drs. Gall and Spurzheim (1815) he had written

> It is acknowledged that Dr. Gall has the merit of having first begun these inquiries. He had pointed out many relations which exist between various actions of man and animals, and certain cerebral parts, before I was so happy as to become acquainted with him. As, however, I have been associated in these examinations during many years, and have charged myself especially with the prosecution of the anatomical part; as I have not a little contributed and still continue to extend, to perfect, and to establish the new doctrine, Dr. Gall himself thinks it just to speak of our inquiries . . . This book itself will show how much I have improved our doctrine in the last few years, during which nothing else has been published on the subject. I am now also led to think, that the objects which are still to be added to our larger work must assume a more scientific arrangement ["systematic" arrangement?], and to be considered in a more philosophical manner, than Dr. Gall has been accustomed to do in his lectures [Italics mine].[47]

One might speculate that it was not Spurzheim, however, who precipitated the separation directly. His statement above that he "was so happy" to become acquainted with Gall and that he could write this after their separation --suggests that he may have held no hard feelings in 1815.

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[46] Ibid., pp. xiv-xv.

[47] J. G. Spurzheim, The Physiognomical System of Drs. Gall and Spurzheim; Founded on an Anatomical and Physiological Examination of the Nervous System in General, and of the Brain in Particular; and Indicating the Dispositions and Manifestations of the Mind, 2nd ed. (London, 1815), pp. vi-vii.

Gall has been described as very independent among other things, and independence as a character trait most certainly does not foster interaction between two brilliant men.[48] When Gall was dying in 1828, it was Spurzheim who requested (and was granted) an audience with Gall. Gall was too ill to see anyone, however, and his doctors would not allow Spurzheim's visit. Thus a reconciliation never occurred. It was probably a combination of factors which contributed to the two men separating. Gall may have viewed Spurzheim as impetuous in regard to his attempts to reformulate their views in a more systematic and philosophical manner. Whether this impetuosity--if in fact it is a correct characterization of Spurzheim--did or did not exist need not concern us. Gall did, in any event, perceive some of Spurzheim's ideas as premature. Gibbon gives us the following account of these events which supports this latter view:

> The origin of the dissension between . . . [Gall and Spurzheim] was this: they had been working together for several years; Spurzheim made various discoveries in the anatomy of the brain, but the credit of them was given to Gall. Spurzheim, whilst acknowledging Gall to be the originator of the science, desired to have his own part in establishing it recognized, and they separated. Gall maintained the system as first propounded [he had "great and rather naive pride" according to some writers (see n. 48)]; Spurzheim advanced with experience and new discovery, modified, improved, or altered as he acquired additional knowledge from practical observation; and, therefore, his theories ultimately differed considerably from those of Gall.[49]

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[48] Ackerknecht and Vallois, p. 12.

[49] Gibbon, 1:211.

The Edinburgh Review's prediction that the "schism in the copartnery"--"the house divided against itself"--would result in a "quarto or two put forth by Gall against Spurzheim, and as many by Spurzheim against Gall" did not materialize.[50] Spurzheim, however did believe that Gall's talents and "the sphere of its operation had their limits," and, that since their separation in 1813, Gall "neither made a new discovery in phrenology, nor a step towards its improvement."[51]

Spurzheim left Paris sometime in 1813 and returned to Vienna to be awarded the M. D. degree. He was now legally able to practice medicine and as was the tradition in German medical education, he would submit his dissertation at a later date. He began his study of English at this period which reportedly he mastered in six months.[52] After a few months in Vienna, he crossed over to England in March 1814 settling first at London. From this period in Spurzheim's life onward, the documentation of his professional activities is improved; for, a great many announcements and accounts of his travels and lectures in the British Isles have appeared. His personal life, however, is less well known. I will deal with the latter first.

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[50] [J. Gordon], review of "The Doctrines of Gall and Spurzheim," Edinburgh Rev. 25 (1815):233.

[51] Spurzheim's n. 3 to the republication of Chenevix's article (1833, n. 6), p. 99.

[52] Capen, "Biography" in Spurzheim, 1833, (n. 6), p. 42.

Spurzheim's Private Life

Between 1814 and 1832 Spurzheim, although spending most of his time in England, alternated residence between France and the British Isles. As was mentioned previously, little information is available on his domestic life. In contrast to reports on the amative life of Dr. Gall--whom we are told had several mistresses and an illegitimate son[53] --Spurzheim has been reported by some writers to have had "if not an aversion, at least, a sort of indifference for the fair sex."[54] His biographer Carmichael, however was of a different opinion. He wrote

> During the sixteen years in which I had the happiness of knowing . . . [Spurzheim,] I had many occasions to witness his value for women, and the pleasure he derived from their conversation and society; and this also I witnessed--that the pleasure was reciprocal. Spurzheim had no aversions--or, if he had, they were reserved for affectation, presumption, hypocrisy, and vice; whatever shape they might assume, male, feminine, or angelic, his very nature would intuitively have recoiled from their contact.[55]

The same writer who felt that Spurzheim had an aversion for women (see n. 54) also felt that he had "little physical courage," was inclined to acquire wealth, and was not generous. To these accusations Carmichael replied similarly:

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[53]Ackerknecht and Vallois, p. 7.

[54]Carmichael, p. 33 quoting "The Lancet, no. 489, p. 496 [sic]."

[55]Carmichael, Ibid., p. 34.

> [Spurzheim's] . . . courage was at least on a level with that of the generality of men; but as to his moral courage, his firmness and resolution, few indeed were his equals. He excelled in that true and genuine spirit of fortitude and heroism , which is not participated with the brutes, but is peculiar to mankind. [As for his tightness with money and lack of generosity, Carmichael replies that] . . . little was the wealth he acquired; and that, without the means, it was scarcely in his power to be eminently generous. From my own knowledge I can assert, that he was eminently kindhearted and eminently hospitable.[56]

Spurzheim's personal feelings toward women--as was reflected in some of his statements about what he perceived to be their role in phrenology's future--are interesting. On one occasion, for example, he stated

> There can be no doubt among phrenologists, that the minds of ladies should be cultivated as well as ours, to fit them for their social relations and duties. With respect to phrenology in particular, I am convinced that among an equal number of ladies and gentlemen, a greater number of the former, are fitted to become practical phrenologists: that is, to become able to distinguish the different forms and sizes of the head in general, and of its parts in particular [not examine heads for a fee]. The reason seems to be, because girls and women, from the earliest age, exercise the intellectual powers of configuration and size, more than boys and men, in their daily occupations . . . It is also evident, that ladies may greatly contribute to the diffusion of phrenology in society, and make frequent use of it in practical life . . . [for] Phrenology teaches us to appreciate women, as well as men, according to their personal merit and virtue. You may daily observe that boys resemble rather their mother than their father in mental dispositions; and it is known that great men generally descend from intellectual mothers.[57]

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[56] Ibid., pp. 34-35.

[57] Ibid., pp. 32-33; also quoted in Capen, Reminiscences, pp. 110-111.

Spurzheim did marry; however, the events surrounding this event are as clouded as were the events surrounding his departure from Treves to join Gall in the 1790's. Capen's (1833) account quotes Follen's (1832) on these events (see n. 6 and n. 2); but, Capen states that Spurzheim was married in 1824; Follen suggests he was married in 1821 (or thereabouts).[58] Carmichael criticizes a writer from The Lancet (n. 54) for suggesting that Spurzheim was "advanced in age" when he married in 1824 since, according to Carmichael, "He married nearly six years before this period; and had not yet reached his 42nd year."[59] Carmichael's account reads as follows:

> [Spurzheim] . . . occasionally visited Paris, and permanently (as he then conceived) settled there in 1818. For at this juncture he married Mademoiselle Perier; and so attached were her relatives to this amiable man, that they induced him to make that city his biding place.[60]

Capen tells us, on the other hand, that "In 1824, Dr. Spurzheim married a French widow lady, with whom he had been acquainted a long time. She was a lady of great accomplishment and merit;" and, Follen, that, around 1821 "Dr. Spurzheim married a lady of great merit. She was a widow, and had three daughters when he married her."[61]

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[58]Capen, "Biography," (n. 6), p. 62, and Follen, (1841), pp. 163-164.

[59]Carmichael, p. 35.

[60]Ibid., pp. 26-27.

[61]Capen, "Biography," (n. 6), and Follen (1841).

To add to the confusion surrounding these events, Hippolyte Bruyères (d. 1856) published a work on phrenology (Paris, 1847, see n. 6) in which he refers to himself as "le beau-fils du Docteur Spurzheim"--i.e., Spurzheim's stepson. This is apparently the only written work published by this writer. It includes beautiful illustrations "gravés sur acier" (120 in all) including a portrait of Spurzheim, reproduced in Walsh (n. 1). Bruyères also painted a portrait of his stepfather which, in 1949, was listed as being in the museum at Poitiers, France. The only information on Bruyeres which this writer was able to locate is the following from the Dictionnaire critique des peintres:

> Bruyères (Hippolyte), peintre, ne à Sedan (Ardennes), mort à Poitiers (Vienne) en 1856 . . . Bruyères debut au Salon de 1833 avec la Mort de Sardanapale. Il exposa assez régulièrement, aux salons suivantes, des toiles assez bien composées, mais quelque peu banalement traitées. Il se plut à la reproduction des costumes ancien.62

There is no mention of Bruyères in the Spurzheim correspondence located at Harvard. In the letters which Harvard does possess which cover the period from c. 1815-c. 1819, the correspondence involves for the most part Spurzheim and his wife-to-be's intimate interchanges. Madame Perier is the woman with whom he communicated. It is possible that Bruyères dropped the last name--Perier--for professional reasons. It is also possible that Madame Perier had either 1) adopted Bruyères or 2) was entering

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62 Dictionnaire Critique et Documentaire des Peintres, Sculpteurs, etc., s.v. "H. Bruyères."

her third marriage when she married Spurzheim; for, in the statement by Bruyères given below, he tells us that he was seventeen years old when they were married (Madame Perier and Spurzheim), and he also refers to their correspondence during the three preceeding years (this must be the MS correspondence at Harvard). Since Bruyères' account of these events is the only published statement by a member of Spurzheim's immediate family concerning our subject's private life, it is reproduced below:

> En juillet 1817, il [Spurzheim] retourna à Paris avec l'intention de s'y fixer, et il s'y maria en 1818. Avant son voyage en Angleterre, le Dr. Spurzheim était recu comme ami dans ma famille: il eut occasion d'apprécier les qualities, l'esprit et le caractère de ma mère; et, à son retour, l'estime réciproque qui les animait, et qui s'était fortifiée par des relations de correspondance pendant les trois années que le Dr. Spurzheim avait consacrées a ses excursions dans la Grande-Bretagne, les engagea à s'unir. J'étais alors âgé de dix-sept ans. Depuis cette époque jusqu'au moment ou une mort prématurée le surprit au milieu de ses travaux, une intimité, fondée, de ma part, sur la reconnaissance, le respect et le plus tendre attachement, de la sienne, sur une bienveillance affectueuse, a toujours existé entre nous. J'ai eu le bonheur de connâitre dans la vie privée un homme aussi éminent par sa haute capacité que distingué par les qualités morales: une parfaite sérénite d'âme, une indulgence bienveillante, une humeur égale, toujours douce, souvent disposée à la gaieté, une constante aménité; tels étaient les traits habituels de son caractère. Jamais je ne l'ai vu se démentir. Il y joignait la dignité du langage et du maintien, la fermeté des convictions, et une indépendance raisonnée qui laissait aux autres toute la liberté qu'il reclamait pour lui-même. Je l'ai vu livré aux préoccupations scientifiques les plus absorbantes. Les luttes qu'il avait à soutenir, dans la difficile et pénible mission de répandre une nouvelle doctrine, excitaient son zèle, sans troubler l'empire qu'il

> avait sur lui-même, quoiqu'il fût très-sensible à la mauvaise foi et à l'injustice. Un travail assidu employait tous ses moments. Un dévouement absolu à la science qu'il s'efforcait de perfectionner était son unique mobile, et jamais aucune vue intéressée n'a balancé dans son esprit l'importance de ses recherches plus satisfaisantes que lucratives. Cependant il était sans fortune, et ses amis le pressaient souvent de se livrer avec plus d'assiduité à la pratique de la médecine. Son désintéressement égalait son amour exclusif pour l'édute à laquelle il s'était consacré.[63]

We are told that Madame Spurzheim, in "her whole manner expressed a union of true humility, tender attachement, and conscious power, which excited at once affection and confidence.[64] We are told further that she

> . . . was a pleasing, accomplished, and valuable woman . . . [and, that] the beautiful drawings which Spurzheim exhibited at his lectures were the production of her pencil. . .[65] [Furthermore, we are informed that] she entered fully into her husband's pursuits . . . But by far more important to him was the aid which he derived from the unseen and inexhaustible treasures of a true and devoted heart.[66]

Finally, and perhaps in partial confirmation of the aforementioned speculations regarding Madame Perier, Bruyères, Spurzheim, and previous marriages, Follen tells us that

> It is characteristic of Dr. Spurzheim, that one of the reasons which influenced him in the choice of a wife, was a knowledge that she had undergone great suffering, which he thought essential to the perfection of human nature.[67]

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[63] Bruyères, p. 500.

[64] Follen, (1841), p. 164.

[65] Carmichael, p. 27.

[66] Follen, (1841), p. 164.

[67] Ibid., p. 165.

On January 25, 1828 a dinner was given in honor of Spurzheim and his wife in Edinburgh. On that occasion Mrs. Spurzheim was made titular head "of the females who study phrenology." Sometime in 1829 she died; and, when Spurzheim was on his death bed three years later "the disease of his [own] heart he ascribed to his loss of her, saying, his pulse had intermitted ever since her death."[68] Whatever else history eventually ascribes to this man, the fact that he was a devoted loving husband who unselfishly took on the problems of a widowed French woman and her family and remained devoted to them until his death, should make him a bit more enchanting, less inhuman, and a bit less illusive in our memories. It is probably quite likely that we would find him today as charming and down to earth as those who met him claimed he was--regardless, as was so often said, of the peculiar theory it was his constant object to defend. In addition to acquiring a "completed" family during this period (Spurzheim never had any children of his own [I will avoid speculation on this point]), and, apart from writing and publishing to an admirable degree, Spurzheim acted the part of the peripatetic philosopher par excellence. A chronology of Spurzheim's life appears in Appendix D which shows--where possible--his month to month itinerary during this period (actually from 1796 to 1832).

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[68] Ibid.

Spurzheim's Professional Activities: 1814-June, 1832

When Spurzheim and Gall separated, Spurzheim must have realized that since the new doctrines and the name Gall were inextricably intertwined on the continent of Europe, he would need to sow the seeds of his extended views elsewhere. It would certainly not have been possible for him to remain in Paris and "compete" with Gall; for, the audience there viewed Gall as the master and originator of the new views and Mr. Spurzheim as his assistant. History has perpetuated this view of Spurzheim in a secondary position--one always hears of the "phrenology of Gall and Spurzheim." Rarely does one hear of the "phrenology of Spurzheim and Gall," or "Spurzheim's phrenology," or the like. Spurzheim must have seen the proverbial "writing on the wall." He then must have reasoned that England--an intellectual center for centuries--would be ripe for his views. He was also prompted to come to England to correct what he then believed to be an unfair and incorrect understanding of his and Gall's views. In the preface to his Physiognomical System (1815[n. 47]), for example, he stated that he was publishing that work "in order to give the English reader a correct view of our general doctrine"[69] (Italics mine)--implying that at that period he thought the English had an incorrect understanding of it. Chenevix speculated that

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[69]Spurzheim, n. 53, p. vii.

> It . . . [was] probable . . . that . . . a mind like Dr. Spurzheim's must have seen that the soil really appropriated to the seeds of his doctrine was profound, reflecting England, where every power of thought is kept so much within its own province, and is so well employed there, and where so important a branch of philosophy would be received with all due reverence. As soon as communications were open [in the winter of 1813-1814], he came to this island, and repaired to London [March 1814]. The moment was not propitous. The nation was still smarting from the scars of war. Many things, too, had indisposed it to the lore of Germany; it was jealous and touchy upon the subject of quackery. [Franz Anton] Mesmer, Mainaduke, [Elisha] Perkins, the morbid sentimentalism of Miss Anne Plumtre's translations, had made it so; and Dr. Spurzheim had to struggle against all these obstacles.[70]

Spurzheim began his campaign in London with a public dissection of the brain. This demonstration was conducted at the "Medico-Chirugical Society's in Lincoln's Inn Fields," and was followed by a course of lectures (which attracted about forty auditors).[71] The lectures were given in the ampitheater belonging to John Abernathy (1764-1831), who Garrison stated "constituted himself a sort of champion of . . .[John Hunter's (1728-1793)] physiologic theories," and, was "the first to ligate the external iliac artery for aneurysm (1796)."[72] Abernathy, according to Follen,

> . . . though he did not give full credit to the evidence brought forward by phrenologists, to prove, that special parts of the brain are

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[70] Chenevix, p. 17.

[71] Capen, "Biography," (n. 6), p. 63.

[72] F. H. Garrison, An Introduction to the History of Medicine, 4th ed. (Philadelphia, 1968), p. 348.

> the organs of certain innate qualities of the mind, fully acknowledged the superiority of Dr. Spurzheim's anatomical demonstrations over every previous mode of dissecting the brain. I have been assured by a gentleman, who, at that time [c. 1813-1814], attended Mr. Abernathy's lectures, [Follen continued,] that he directed the attention of his class to Dr. Spurzheim's anatomical labors as most important discoveries.[73]

Furthermore, Follen quotes Abernathy as stating that Spurzheim was

> . . . a man who made the motives of human actions a particular study, possessing also great intellectual powers, combined with benevolence and caution in decision . . . [and, Abernathy is also alleged to have expressed the] great gratification he had in being intimate with Dr. Spurzheim whilst he remained in London.[74]

In his "Reflections on Gall and Spurzheim's System of Physiognomy and Phrenology," Abernathy gives us his first hand opinion of these theories. It would be an understatement, to say the least, to observe that Abernathy is a highly revered personage in medical history. His views, therefore, cannot be taken too lightly, i.e., we cannot consider his views of Spurzheim as reflecting ignorance on his part (based on what we know about phrenology today), nor can we contend that they were invalid evaluations. The following is his account of these early events. He presents himself as the cautious inquirer--not as the uncategorically rejecting critic.

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[73]Follen, (1841), p. 161.

[74]Ibid.

When Dr. Spurzheim, impelled by laudable enthusiasm, and the belief that he could communicate new and important information relative to the nature of man, and the means of improving his mental faculties and moral character, came to this country, he met with but very few who would give the subject he proposed to them that patient attention and consideration which are necessary for its clear comprehension, or that continued examination which alone can enable any one to form his own opinion respecting the merits or truth of his system. General attention, therefore, to Gall and Spurzheim's opinions seemed to have subsided in this country, when a most able and eloquent advocate came forward in their behalf [George Combe75], asserting the superiority and excellence of their system of phrenology, and his own conviction of the correctness of their proposed mode of physiognomical enquiry. In his judgment, respecting the former subject, I readily concur, but am incompetent to give an opinion upon the latter; for when I first heard Dr. Spurzheim's lectures, I candidly told him, that though I admitted his opinions might be true, yet I would never enquire whether they were so or not; because, I believed the proposed mode of judging of one another [the physiognomical part] to be unjust, and likely to be frequently productive of erroneous and injurious conclusions.

But notwithstanding this resolution, I did not absolutely shut my eyes against those facts which obtruded themselves before my view; and I acknowledge that I have been often struck with the coincidence between the character and talents of persons and the form of their heads, which was such as is said to be indicative of their peculiar dispositions and abilities. The intelligence and candour of Dr. Spurzheim, however, induced him to say to me, that it matters not how many coincidences we may observe; one contradictory fact must disprove them all, with respect to the asserted locality of any organ; and such contradictory

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[75]Gibbon, 1:142. In that source Gibbon stated that "The most gratifying of all the proofs that the doctrines [of phrenology] were gaining ground [at that time] was the publication of a pamphlet on the science [n. 76], in which Abernathy 'declared decidedly in favour of Phrenology as a system of the philosophy of man.' But he feared evil might arise from the incautious use of the physiognomy." Gibbon also quotes Combe who is said to have stated that Abernathy alludes to him (Combe)--but not naming him--as "The system's most able and eloquent advocate."

facts have, as I believe also presented themselves before me . . .

If a man, like Dr. Spurzheim, who had made the motives of human actions a particular study, possessing also great intellectual powers combined with benevolence and caution in decision, should from the survey of another's head suppose that he had discovered his character, he would next observe his conduct with particular attention, in order to determine how far his cranioscopical inferences were confirmed by facts. Thus would his speculations only lead to an enquiry which of itself alone forms the fairest and surest criterion that we can possess of judging of one another . . .

The views which Drs. Gall and Spurzheim have taken of the nature of the dispositions and faculties of man and animals appear to me, however, both new and philosophical, and these admit of being surveyed without any reference to organization or its supposed situation. It is thus only that I submit them to you as well deserving your examination; for I think it will be acknowledged that they have drawn a correct portrait of human nature, whether they be right or wrong in their speculations concerning protuberances which they have depicted. Believing that some, pleased with the phrenology, may overrate their physiognomy or cranioscopy, whilst others, from perceiving the uncertainty and ill-consequences of the latter, may be inclined to undervalue the former, I am induced for reasons already mentioned, to urge your attention to these subjects. From my deficiency in literary research, and my neglect of registering what I may have read, I am unable to trace the sources of my own opinions, yet as I proceed I shall candidly avow them, without presuming to suppose that others have not thought in the same, or in a better manner, and to a greater extent . . . [Italics mine].[76]

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[76] J. Abernathy, The Surgical and Physiological Works of John Abernathy from the Six[th] London Edition. Embracing Reflections on Gall and Spurzheim's System of Phrenology 2 vols. (Hartford, 1825) 2:44-49. For a review of Abernathy's work see "Abernathy's Reflections on Gall and Spurzheim," Eclectic Rev. 35 (1821):551-560.

Finally, after presenting an account of Gall and Spurzheim's System Abernathy concludes:

> In short, I readily acknowledge my inability to offer any rational objection to Gall's and Spurzheim's system of phrenology, as affording a satisfactory explanation of the motives of human action.[77]

This warm and receptive welcome by one of England's leading physicians, however, was not representative of what was ahead for Spurzheim. Toward the end of 1814 he was completing the manuscript of a work which was to present his and Gall's views for the first time to the English reading world. Early in 1815 he issued the work under the formidable title The Physiognomical System of Drs. Gall and Spurzheim; Founded on an Anatomical Investigation of the Nervous System in General, and of the Brain in Particular, and Indicating the Dispositions and Manifestations of the Mind (London: Baldwin, Cradock and Joy). A second edition of the same work was issued around 15 June of the same year with corrections. This was Spurzheim's magnum opus; for it was from this publication that he would later extract chapters and extend them into separate works. In addition, except for other smaller "Outlines" of his and Gall's system, this would be the last time Gall's name appeared in a title conjointly with Spurzheim's--I will reserve discussion of this and other works for a later section.

Immediately upon publication of The Physiognomical System "a swarm of reviewers fastened on it."[78]

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[77] Ibid., p. 67.

[78] Carmichael, p. 12.

> The Quarterly, the Eclectic, The British, The Edinburgh, The Critical, and The Monthly, The London Medical Repository, and The British Critic, all exerted their powers of ridicule, invective, and argument . . .[79]

Regarding The Edinburgh Review in particular, Hewitt C. Watson in his Statistics of Phrenology (1836), has commented that in 1815 it

> . . . was . . . the mouth-piece of a grand tribunal for trying the merit of all works, literary and scientific, and pronouncing judgment upon all systems and doctrines, fanciful and philosophical. This formidable name, and the editorial WE, sheltered a number of able and anonymous writers, who were at once plaintiffs, witnesses, counsel, jury and judges in the trial of every defendant-writer appearing before the bar--not the bar of the public, for the public then acted the part of spectator only--but before the bar of this assemblage of goose-quilled potentates; to one or more of whom was assigned the easy and irresponsible duty of filling all the aforesaid offices of plaintiff, witness, counsel, jury and judge upon each trial.[80]

The other reviews, although equally vituperative, were not to assume the historical import that the powerful Edinburgh Review review did. We know that John Mason Good was anonymous author of the review appearing in The British Review,[81] and the others, like The Quarterly Review reviewer, remained anonymous also. The Edinburgh Review article in which

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[79] Ibid.

[80] H. C. Watson, Statistics of Phrenology: Being a Sketch of the Progress and Present State of That Science in the British Islands (London, 1836), p. 4.

[81] O. Gregory, Memoires of the Life, Writings, and Character of the Late John Mason Good (Boston, 1829), p. 78.

"Hardly an opprobrious epithet in the language was omitted on . . . [Gall and Spurzheim's] moral, as on their intellectual, character . . ."[82] began its review with the remark that

> Our readers will here recognize, without any difficulty, the same man of skulls, whom [the Editorial] we had occasion to take notice of, more than twleve years ago. Long before this time, we should have looked for his craniological death . . . We look upon the whole doctrines taught by these two modern peripatetics, anatomical, physiological, and physiognomical, as a piece of thorough quackery from beginning to end . . .83

After lengthy discussion and a critique of Spurzheim's phrenological system, the reviewer concluded with the remarks:

> The writings of Drs. Gall and Spurzheim, have not added one fact to the stock of our knowledge, respecting either the structure or the functions of man; but consist of such a mixture of gross errors, extravagant absurdities, downright misstatements, and unmeaning quotations from Scripture, as can leave no doubt, we apprehend, in the minds of honest and intelligent men, as to the real ignorance, the real hypocrisy, and the real empiricism of the authors.84

In later years, when phrenologists gave accounts of their history, the author of this review would be referred to as the infamous "Edinburgh Reviewer." In fact, however, he was ultimately identified as Dr. John Gordon, a lecturer,

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[82] Chenevix, p. 18

[83] Edinburgh Rev. 25 (1815):227. The earlier review referred to appeared in this journal, 2(April 1803):147-160.

[84] Ibid.

"(extra-mural as regards the university) in Edinburgh on anatomy and physiology, an aspirant to further advancement in the university and infirmary."[85] At the time of his writing of the review, we are told further, he "had recently been appointed to a junior surgeonship in the infirmary, but advanced no further."[86]

At the time the review appeared, Spurzheim was residing in London (11, Rathbone Place); and, although he thought that he might visit the "Scottish Athens" (i.e., Edinburgh) sometime in the future if possible, the appearance of Gordon's review removed all doubt. After delivering lectures in Bath, Bristol, Cork and Dublin, he proceeded to Edinburgh arriving in November 1815. It would be an understatement to say that his audience there was at first unreceptive. They had been "poisoned" by The Edinburgh Review. Carmichael observed that when Spurzheim arrived in Edinburgh, he

> . . . found every mind poisoned against him by these liberal and philosophic effusions [of The Edinburgh Review].--I did not myself escape the infection. It was with difficulty I was persuaded to enter his lecture room; but having then an abundance of leisure, I thought a few hours would not be much misspent in indulging an idle curiosity, and reaping some little amusement where I could hope but for little information. I listened to . . .

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[85] W. M. Williams, A Vindication of Phrenology (London, 1894), p. 333. Williams devotes an entire Chapter to the events of this period (Chapter XVIII).

[86] Ibid.

> [Spurzheim's] first lecture, expecting it to breathe nothing but ignorance, hypocrisy, deceit and empiricism. I found it fraught with learning and inspired by truth; and in place of hypocrite and empiric, I found a man deeply and ernestly imbued with an unshaken belief in the importance and value of the doctrines he communicated. I listened to his second lecture, and I adopted his belief.87

Leaving Edinburgh in January 1816, Spurzheim began a series of lectures in Cork, and then lectured in and around Scotland and Ireland through till June and arrived back in Edinburgh on June 24th of that year (see Appendix D for complete itinerary). Sometime between June and September the now famous confrontation with the "Edinburgh Reviewer" occurred. Chenevix has recounted these events:

> [Spurzheim] . . . procured one letter of introduction to that city [Edinburgh], and but one; that was to the reputed author of the vituperating essay [Dr. Gordon]. He visited him and obtained permission to dissect a brain in his presence. The author himself was a lecturer on anatomy, and the dissection took place in his dissecting room. Some eyes were little more, or a little less, clear-sighted than others, for they saw, or thought they saw, fibres.88 A second day was named. The room was as full as it could be, particularly as an intermediate bench was reserved for Dr. Spurzheim to carry round the subject of enquiry to every spectator. There, with the Edinburgh Review in one hand, and a brain in the other, he opposed fact to assertion. The writer of the article [Dr. Gordon] still believed the Edinburgh Review, but the public believed

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87 Carmichael, pp. 14-15. According to Follen (1841), Spurzheim lectured in Bath, Bristol, Cork and Dublin before proceeding to Edinburgh in November, p. 162 (q.v., Chenevix, pp. 17-18).

88 Gordon had denied Spurzheim's contention that the brain was fibrous.

> the anatomist; and that day won over near five hundred witnesses to the fibrous structure of the white substance of the brain, while it drew off a large portion of admiring pupils from the antagonist lecturer.[89]

Spurzheim's own account is not without interest. It was reported by Williams as follows:

> From the beginning I requested these gentlemen [Dr. Gordon and an associate Dr. Thompson] not to lose an opportunity of getting a brain. The partner of the reviewer, surgeon of the military hospital [Dr. Thompson], furnished me with arms to combat them in their own lecture room. Indeed, I could never have expected such a gratification. The whole happened accidentally, but I could not wish it more favourably. I gave notice to a few of my friends, that the opposite party might not be alone. The reviewer was to lecture at two in his class. I intended to cease and continue after; but he was so kind as to yield his hour to me; so that I had the pleasure of demonstrating the brain to his own class at his lecture table in presence of himself, Drs. Thompson, Barclay, Duncan, Junr., Irwin, Emery, and many others.
>
> There could not have been a better brain, everything was clear and satisfactory. The poor reviewer was in a most disagreeable predicament. However, as I was at his table I did not wish to appear impolite. I did not mention him; and it was not necessary, as he was known to the audience. I only stated: This is denied,--and then made the preparation. We are accused of such a thing, or blamed for showing such or such a structure. And then I presented the structure in nature. At the same time I had our plates at hand, and asked the audience whether they represented the preparations as I had made them. The answer was always affirmative.
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> The reviewer avoids me entirely. After the lecture he went immediately to his little room. His partner spoke to me, and mentioned that now he will study our plates.

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[89] Chenevix, p. 18.

> You perceive by this that I have taken a strong position, and am no longer on the defensive. My friends who are in opposition to the reviewer's party tell the story everywhere; and I continue to invite everyone to procure me an opportunity of showing what we maintain. As to the anatomy, complete victory is no longer doubtful, because competent judges were present; and with that gratification I shall begin to speak to the public . . . [this month]. The poor reviewer, as physiologist, can scarcely avoid to come. I shall invite him, and he must be prepared to undergo a severe discipline. I certainly shall provoke him to appear, if he like[s] candour and faith.90

As one can gather from a perusal of many accounts of this visit, Spurzheim's success on the anatomical bench was great. George Combe (1788-1858), however, who was later to become Spurzheim's major disciple, did not attend these early lectures; for, at that time (1815-1816) he too had been "poisoned" by The Edinburgh Review and "Led away by the boldness of that piece of criticism . . . regarded the system as contemptibly absurd, and the authors of it as the most disingenuous of men."[90] One final first-hand account of the events in Edinburgh which appeared in the Medico-Chirugical Journal and Review (3[1817]:425) supports the preceding remarks regarding Spurzheim's successful rebuttal:

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[90]Williams, pp. 335-336.

[91]G. Combe, Essays on Phrenology, or an Inquiry Into the Principles and Utility of the System of Drs. Gall and Spurzheim, and Into the Objections Made Against it (Philadelphia, 1822), p. lv; q.v. further discussion of this in A. A. Walsh, "George Combe: A Portrait of a Heretofore Generally Unknown Behaviorist," J. Hist. Behav. Sci. 7 (1971):269-278.

Dr. Spurzheim sank not under this cruelty of criticism, which he bore with a serenity of deportment worthy of a man of science. On the contrary, his moral character appeared more bright in the eyes of those who knew him, simply by being contrasted with the foulness of the epithets that had been thrown upon it. He came to Edinburgh, therefore, not to indulge feelings of personal irritation, but in a spirit of meekness, anxious to find out his opponent, for no other purpose than that he might convince him, by ocular demonstration of the peculiar structure of the brain which he had described in his works and plates.

I had the good fortune to be present at his first demonstration, which took place before a considerable number of eminent anatomists; the person also was there who rumour alleges to be the author of the offensive article in the Review. I marked the conduct of that individual, and if the outward deportment could be viewed as an indication of what was passing in the mind, he was certainly labouring under suppressed emotion; and more than once tried to disembarrass himself by pulling from his pocket and reading, or pretending to read, the superscription of a letter. He generally contented himself with distant hurried glances at what was demonstrated, and upon the whole seemed both uneasy and inattentive.

I am the more minute as to these facts, because he has since alluded to this demonstration as being by no means satisfactory; he was probably, however, the only individual to whom it was not satisfactory.

Attempts have been made to misrepresent the feelings and judgment of the audience, which were unquestionably in favour of Dr. Spurzheim, in the proportion of at least twenty to one. It would have been too much to expect perfect unanimity on a question and an occasion of this sort.

Since this notable occasion, Dr. Spurzheim has dissected the brain before the Royal Physical Society, and repeatedly to mixed audiences; and it is but bare truth to say, that I do not know any man of sense or candour who does not bow to the correctness of his pathological views, [sic] and admire the beautiful accuracy of his demonstrations. I conclude by saying, that I have no connection with Dr. Spurzheim, and he knows

> nothing of my having taken this step. To my respect, as to that of every other man, he is entitled by his superior talents as well as his excellent and amiable character; but upon me he has no particular claim, save that which I am ever ready to allow to injured merit.[92]

Following these events, Gordon published a signed rebuttal, viz., Observations on the Structure of the Brain, Comprising an Estimate of the Claims of Drs. Gall and Spurzheim to the Discovery of the Anatomy of that Organ (London, 1817) to which Spurzheim responded with Examinations of the Objections Made in Britain Against the Doctrines of Gall and Spurzheim ([London], 1817).[93] The latter was referred to by Williams as "a classical landmark in connection with the history of discovery in cerebral anatomy."[94] The reader is referred to his work and Carmichaels for elaboration of these events. Suffice it to say, Spurzheim was viewed at the time as being the "victor" in this series of polemics.

To return to 1815 for a moment, I should like to mention that it was during that year that Spurzheim established a friendship with Thomas Forster, author of Researches About Atmospheric Phenomena, Observations on the Swallow, Notes on the Diosemea of Aratus, etc.[95]

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[92]Quoted in Williams, pp. 336-337; also quoted in full in the Phrenological J. and Misc. 9 (Edinburgh, 1835): 526-531.

[93]Reissued in Boston (1833).

[94]Williams, p. 339.

[95]Notation on title page of T. Forster, Sketch of the New Anatomy and Physiology of the Brain and Nervous System of Drs. Gall and Spurzheim, Considered as Comprehending a Complete

Prior to this date, i.e., prior this period, Spurzheim would refer to his and Gall's system as "the physiognomical system," "craniology," or "organology"--terms which Gall himself employed. In 1815, Forster published a work in which he referred to Gall and Spurzheim's system as comprehending a complete system of "phrenology" using the term "phrenology" for the first time in its "modern" sense (see discussion of this in Chapter II, and the section on Rush in Chapter IV). It is very likely that Spurzheim adopted this term from Forster since the latter author used it the earliest. In a subsequent issue of this same work by Forster, however, the word "zoonomy" was substituted in the title for "phrenology" (see n. 95 for complete title). During the same year (1815) Spurzheim published his Outlines of the Physiognomical System of Drs. Gall and Spurzheim (London).

In the Fall of 1816, and "aided by [his] success [in Edinburgh, Spurzheim] . . . opened a[nother] course of lectures on the anatomy and the functions of the brain, and its connection with the mind."[96] He is quoted as having often said to the Scotch at this period

> You are slow, but you are sure; I must remain some time with you, and then I'll leave the fruit of my labours to ripen in

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System of Phrenology. With Observations on its Tendency to the Improvement of Education, of Punishment, and of the Treatment of Insanity (London, 1815).

[96]Chenevix, p. 19.

> your hands. This is the spot from which, as from a centre, the doctrines of phrenology shall spread over Britain.97

The gauntlet thus thrown down was eventually (1816-1817) took up by George Combe who, true to Spurzheim's prediction, made Edinburgh the center from which phrenology spread, not only over all of Britain, but to America as well.[98]

After his seven months stay in Edinburgh, Spurzheim returned to London in 1817 where he resumed his lectures. His doctrines had made "many converts" there, we are told by Follen, and at this juncture he was made a "Licentiate of the Royal College of Physicians"--his residence now was "Foley-place, Portland-Street."[99] Although Spurzheim may have made "many converts," he would continue to have to contend with literary, professional, and satirical criticism. For example, in regard to the latter, the renowned satirist-illustrator, George Cruikshank, published a satire on their system in 1826 (D. C. Johnston published a similar item in 1836).[100] Earlier, however, The Craniad had appeared.[101]

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[97] Ibid.

[98] "George Combe."

[99] Follen, (1841), p. 163, and Carmichael, p. 27.

[100] G. Cruikshank, Phrenological Illustrations, or an Artist's View of the Craniological System of Doctors Gall and Spurzheim (London, 1826), and D. C. Johnston, Phrenology Exemplified and Illustrated Being Scraps No. 7 for the Year 1837 (Boston, 1836).

[101] The Craniad: or, Spurzheim Illustrated. A Poem in Two Parts (Edinburgh, 1817).

This latter work was published anonymously but the preface indicates that it was the work of two writers (allegedly Dr. John Gordon with either Dr. Thompson or Lord Jeffrey). The Craniad was published in a small duodecimo volume of one hundred forty-one pages--eighty-seven pages devoted to the poem, and the remainder keyed to notes to Spurzheim's 2nd ed. of The Physiognomical System. Although it is not worth dwelling on at length, it was sufficiently derogatory to create more difficulties for Spurzheim in his attempts to gain the affection and respect of the British public. A short quote from it will suffice to indicate its tone:

> Alas! we've faculties within the head,
> ('For there all faculties are born and bred,')
> Which nature forms so large, so full, and strong
> they spur their owners just like nags along!
> With bumps, so manifestly high and big,
> that they'll appear through night-cap, hat, and wig!
>
> Thus have we sung, in craniologic strains,
> The marks of character,--the laws of brains;
> Thus have we proved what ne'er was proved before,
> But which, once proved, can ne'er be doubted more,
> That every faculty is born and bred,
> And rear'd to full perfection, in the head.
> That mind depends on brains we've clearly shown,
> For when the brains are out, the mind is flown;
> That skulls contain the laws of human life,
> Which often are with human laws at strife.102

In 1817, Spurzheim began extracting and extending chapters from The Physiognomical System and issuing them as separate works. The first to appear was an extension of

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[102]Ibid., pp. 51, 75-76.

Chapter IV, from Part V.--"Practical Part" which had been entitled "Influence of our doctrine upon medicine; or on the diseased state of the brain, and on the derangements of the manifestations of the mind." The new work was entitled Observations on the Deranged Manifestations of the Mind, or Insanity (London, Baldwin, 1817), and it was reissued in France (1818), Germany (1818), and, later, in the U. S. (1st Amer. ed. [Boston, 1833]; 2nd Amer. ed. [Boston, 1835], and facsimile of 1st Amer. ed. [Gainesville, Fla., 1970 (see n. 6)]).[103] After a three year residence in England, Spurzheim appears to have been anxious to return to Paris. Carmichael stated that he visited Paris "occasionally [around this time] . . . and . . . permanently . . . settled there in the year 1818."[104] Others[105] suggest that he settled there in 1817. In any event, it was around this period that he courted Madame Perier (see supra). Upon his arrival in Paris, he set up medical practice, continued to lecture, and continued with his writing. In the autumn of 1818 he published Observations sur la Phraenologie, ou la Connaissance de l'homme Moral et Intellectuelle, Fondée sur les Fonctions du Systeme Nerveux (Paris) using "phrenology" for his first

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[103] see Observations sur la Folie, ou sur les Dérangemens des Fonctions Morales et Intellectuelles de l'homme (Paris, 1818), and Beobachtun gen ueber den Wahnsinne und die Damit Verwandten Gemuethskrankheiten (Hamburg, 1818).

[104] Carmichael, p. 26.

[105] e.g., Follen (1841), p. 163.

time in reference to his and Gall's system in a personally authored published work. In the same year (1818) another satirical attack appeared in Britain, viz., Craniology Burlesqued in Three Lectures Humbly Recommended to the Patronage of Dr. Gall and Spurzheim, but at this period George Combe had come forward as phrenology's (Spurzheim's) "apostle"--and Britain, therefore was in good hands.[106] In Paris, George Combe's younger brother Andrew (1797-1847) was studying medicine and had occasion to attend Spurzheim's lectures during the winter session, 1818-1819. At this time in the history of French medicine, Ackerknecht has pointed out, "private teaching was frequent . . . [and] teaching in the specialties existed only as private instruction up to the 1870's."[107] "Private courses allowed more detailed studies," he wrote, thus, "unorthodox opinions could be defended." Among the many giving such private courses at this time were Bichat, Broussais, Laennec, Gall and, of course, Spurzheim.[108]

Andrew Combe is most well known for his physiological writings, e.g., it was he who republished William Beaumont's classic Experiments and Observations on the Gastric Juice, and The Physiology of Digestion (Edinburgh, 1838 [from 1833 1st Plattsburgh, N.Y. ed.]). He regularly contributed to

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[106] Walsh, "George Combe," p. 273.

[107] E. H. Ackerknecht, Medicine at the Paris Hospital; 1794-1848 (Baltimore, 1967), p. 43.

[108] Ibid., pp. 43-44. Ackerknecht, however, does not list Spurzheim.

the phrenological literature, however, and in 1831 published Observations on Mental Derangement: Being an Application of the Principles of Phrenology to the Causes, Symptoms, Nature, and Treatment of Insanity (Edinburg, 1831).[109] In his introduction to this latter mentioned work, Combe himself relates how he was "converted" to phrenology when, in his leisure in the Fall of 1818, he first perused Spurzheim's Observations sur la Phraenalogie (see supra). "I had not proceeded far," he remarked, "before I became impressed with the acuteness and profundity of many of the author's remarks."[110] More interesting in regard to our narrative, however, are Combe's remarks relating to a "test" of Spurzheim's ability to describe the character of an individual while living on the basis of that individual's disembodied brain alone which occurred on 1 December 1818. I will let Combe tell the story in his own words:

> [In the] . . . winter session, [1818-1819,] I had the advantage of being able to attend two Courses of Lectures delivered by Dr. SPURZHEIM, at Paris, on the Anatomy, Physiology, and Pathology of the Brain and Nervous System, during one of which rather a striking confirmation of his doctrine occurred. In the middle of the lecture of 1st December, 1818, a brain was handed in, with a request that Dr. SPURZHEIM would say what dispositions it indicated, and he would then be informed how far he was correct. Dr. SPURZHEIM took the brain without any

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[109] Reissued as the 1st Amer. ed. in Boston (1834) and in facsimile at Delmar, New York (1972) with an "Introduction" by this writer.

[110] Ibid., 1972 ed., p. 7.

hesitation, and, after premising that the experiment was not a fair one, in as far as he was not made acquainted with the state of health, constitution, or education of the individual, all of which it was essential for him to be aware of before drawing positive inferences; he added, that nevertheless, he would give an opinion on the supposition that the brain had been a sound one, and endowed with ordinary activity. After which, he proceeded to point out peculiarities of development which it presented, and desired his auditors to remark the unusual size of the cerebellum, or organ of Amativeness, and the great development of the posterior, and of part of the middle lobes of the brain, corresponding to the organs of the lower propensities, the convolutions of which were large and rounded, forming a contrast with the deficient size of the anterior lobes, which are dedicated to the intellectual faculties. The convolutions situated under the vertex, and towards the top of the head, belonging to the organs of Self-Esteem and Firmness were also very large, while those of Veneration and Benevolence were small. These peculiarities were so well-marked, that Dr. SPURZHEIM felt no difficulty in inferring that the individual would be very prone to sensual indulgences; that "his natural tendencies would not be towards virtue;" that he would be what is familiarly expressed in French by "un mauvais sujet," being a very comprehensive term for every variety of bad dispositions, and that "he would be one to whom the law would be necessary as a guide;" but, not knowing the circumstances in which he had been placed, he could not say what his actions might have been.

At the conclusion of the lecture, a young man, an élève interne of the Hotel Dieu, came forward and said, that the brain was that of a suicide, who had died in that hospital, and that the dispositions inferred by Dr. SPURZHEIM coincided perfectly with those manifested during life. As I was at the same time following the surgical clinique of the celebrated DUPUYTREN, whose patient he was, and as the case was interesting both in professional and phrenological point of view, my attention had been particularly directed to this very individual, from the day

> of his entrance into the Hotel Dieu, to that of his death, a period of about fourteen days; and I was thus better able to appreciate the perfect accuracy of Dr. Spurzheim's conclusions, than if I had merely trusted to the report of the élève. The man, it appeared, had been a soldier, and had, for some crime, suffered an ignominious punishment, and been dismissed from the army. He returned to Orleans, to resume his trade of barber, but every one shunned him; and, suspecting his wife to have been secretly his enemy, he attempted to kill her with a knife, and, being defeated in this, he stabbed himself in the side, was carried to the hospital, and died of the wound. As he lay in bed, the head sunk in the pillow, its size seemed to be small; but this arose from the anterior part, or the seat of intellect (which was very deficient) being alone visible, the whole bulk consisting of the organs of the propensities. DUPUYTREN, when commenting on the case, in his lecture, made daily complaints of the man's mauvais moral, imperiousness, and violence of temper, and represented these qualities as great obstacles to his recovery. So that, altogether, the close coincidence between the facts with which I was familiar, and the remarks of Dr. SPURZHEIM, who had never seen the skull, and judged from the brain alone, as it lay misshapen on a flat dish, made a deep impression on my mind, as it went far to prove, not only that organic size had a powerful influence on energy of function, but that there actually were differences in different brains, appreciable to the senses, and indicative of diversity of function.[111]

During the year 1819, Spurzheim continued to lecture in Paris. During the same year he issued his Outlines of the Phrenological System of Drs. Gall and Spurzheim (London). In 1820 he was experiencing "prosperity, comfort and happiness [in an] . . . hospitable mansion in the Rue Richelieu."[112]

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[111] Ibid., 1970 ed., pp. 8-10.

[112] Carmichael, p. 27.

He now issued his Essai Philosophique Sur la Nature Morale et Intellectuelle de l'homme. In this same year on 22 February the Edinburgh "Phrenological Society" was founded by George Combe, James Brownlee, Andrew Combe, David Welsh and others;[113] and, on 20 March 1820 both Gall and Spurzheim were made "honorary members" (although one wonders whether Gall acknowledged this honor since he was against "Spurzheimian phrenology"). "Corresponding members" included, for example, John Elliotson, M.D., "Physician to St. Thomas's Hospital, London." On 2 February 1821 Spurzheim wrote to David Welsh of Edinburgh. Therein he stated "je me propose de passer le reste de ma vie, occupé de la connaissance de l'homme dans l'etat de santé et de maladie."[114] He now issued A View of the Elementary Principles of Education Founded on The Study of the Nature of Man (Edinburgh, 1821) followed by his doctoral thesis Du Cerveau sous le Rapport Anatomique (Paris, 1821).[115]

The state of phrenology in France in and around June 1821 has been discussed in several sources.[116] In a communication to the editor of the New Edinburgh Review (October, 1821), for example, we are told that some of the most "eminent

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[113] see Transactions, n. 14.

[114] Ibid., p. 14.

[115] Another source lists this under the title Encephalotomie, ou du Cerveau Sous ses Rapports Anatomique; Thèse, etc. (Paris, 1821). I have not been able to locate this work.

[116] Capen, n. 6, pp. 59-61 who quotes Combe, n. 14, pp. 16-18.

professors" have avowed a belief in phrenology. Blainville, Geoffrey St. Hilaire and Monsieur Roger are cited.[117] Ackerknecht concurs that Gall had influenced St. Hilaire and adds to the list the names Corvisart, Broussais, Bouillard, Adelon, Morel, Georget, Calmeil, Lallemand, Desmoulins and Broca--"whose 'speech center' was actually Gall's discovery." Furthermore, Ackerknecht points out, Gall's partisans included "the admiral Dumont d'Urville and the Duke of Montebello, the sculptor David d'Angers and the painter Gerard" adding that Gall's "imprint is discernible in the writings of Balzac, George Sand, DeVigny, Baudelaire, Flaubert, Saint-Beuve, and Comte."[118]

But, these were Gall's successes, not Spurzheim's. Gall had not lectured during Spurzheim's absence from France (1814-1817), but when Spurzheim returned Gall gave two public free courses, one "à l'Ecole de Medicine," and the other in the hall "de l'Institution pour les Aveugles." Since settling in Paris, Spurzheim gave two three-month courses each year "sur l'Antomie, la Physiologie, et la Pathologie du Cerveau, et des Sens exterieurs," and, in 1821 Spurzheim was awarded the degree of Doctor of Medicine by the University of Paris.[119]

In 1822, as a result of pressures placed on the

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[117] Ibid., Combe, pp. 16-17.

[118] Ackerknecht, p. 172.

[119] Combe, n. 14, pp. 15-16.

government by the Jesuits, the freedom of the press was curtailed and public lectures were forbidden without a license--"at that period (1827) the Jesuits governed the government."[120] In 1824, Spurzheim was refused a license to instruct a class larger than twenty individuals. But from 1822-1825 (c. March) he remained in Paris. However, the fact that his lectures were limited and the fact that Gall was experiencing great success probably induced him to return to England. Between c. March 1825 and early in 1832 he alternated residences between France and England spending the greatest amount of his time in the latter country. A somewhat detailed account of his itinerary over these years is included in Appendix D. In December 1823 the first number of the Phrenological Journal and Miscellany appeared, founded by George Combe.[121] This journal ran periodic accounts of Spurzheim's activities from then on until his death in 1832 and the interested reader will find in their "Notices" at the end of each number indications of the progress of and comments regarding the success of Spurzheim as he wound his way through the British Isles.

From 1825-1832 Spurzheim continued to publish. In 1825 he wrote A View of the Philosophical Principles of Phrenology (London). This work was designated a third edition--the first edition appears to have been in The

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[120]Carmichael, p. 27.

[121]Gibbon, 1:161.

Physiognomical System (1815), the second, his Essai Philosophique (1820, n. 8). This "third edition" was a reworking--but not a direct translation--of the Essai Philosophique. A fourth edition (but not so labeled was republished in Boston (1832) as "Vol. II. Philosophical Part." of Spurzheim's Phrenology, or the Doctrine of the Mental Phenomena (1st. Amer. ed., 2 vols. [Boston, 1832]). Around 3 May 1825, Spurzheim had enough material remaining from his extraction operations on The Physiognomical System to issue a "third edition," of that work and this appeared as Phrenology, on The Doctrine of The Mind; and of The Relations Between its Manifestations and The Body (London). Furthermore, since phrenological demonstrative busts were now being sold, he felt required to issue Précis de Phraenologie, Contenant l'Explication du Buste (Paris, 1825). This was followed by A Philosophical Catechism of the Natural Laws of Man (London, 1825).

In 1826 Spurzheim's Phrenology in Connexion With the Study of Physiognomy. Part I. Characters (London) was published (reissued in 1833 [see n. 6]). Subsequent parts of this work, however, were not issued. R. Willis translated Spurzheim's "unpublished French manuscript" on anatomy and published it as The Anatomy of the Brain, With a General View of the Nervous System (London [reissued in Boston, 1834 (revised by Charles Stedman, M.D.)]). These works were followed by

A Sketch of the Natural Laws of Man (1828

[1st Amer. ed. as Philosophical Catechism of the Natural Laws of Man (Boston, 1832); 2nd Amer. ed., (Boston, 1832-1833); 3rd Amer. ed. (Boston, 1833); 4th Amer. ed. (Boston, 1835); 5th Amer. ed. (Boston, 1839)--all these editions differ from Spurzheim's 1820, 1825, & 1832 "philosophical works" (still in print [New York, c. 1852])]); Correspondence Relative to Phrenology [between Sir W. Hamilton, Spurzheim, & G. Combe] (Edinburgh, 1828); Appendix to the Anatomy of the Brain, Containing a Paper Read before the Royal Society on the 14th May, 1829, and Some Remarks on Mr. Charles Bell's Animadversions on Phrenology (London, 1830 [reissued and bound with Spurzheim's 1834 (Boston) Anatomy, n. 43]); Outlines of Phrenology, Being also a Manual of Reference for the Marked Bust (London, 1829 [reissued as 1st Amer. ed. (Boston, 1833); 2nd Amer. ed. (Boston, 1833); 4th Amer. ed. (Boston, 1836)]; Phrenology Article of the Foreign Quarterly Review, by Rich. Chenevix [n. 6] with Notes from Spurzheim (London, 1830 [reissued (Boston, 1833) and bound with Spurzheim's Examination of the Objections (original ed., London, 1817)]); Sixty Phrenological Specimens Described by Dr. Spurzheim ([London, 1831]); and, Manuel de Phrenologie (Paris, 1832).

With the exception of Spurzheim's Syllabus of a Demonstrative Course of Eighteen Lectures on Phrenology,[122] and the publication of the fourth edition of The Physiognomical System in Boston as Phrenology on the Doctrine of the Mental Phenomena (2 vols. [Boston, 1832]), the Manuel de Phrenologie may be considered his last work (see Appendix D for further information on his activities and publications to 1832).

By April 1831 Spurzheim was hoping to be able to settle permanently in England. At this point he was fifty-four years of age. His hopes for a Chair of Anthropology in a London College or University did not materialize, however, and he returned to France later that year. Early in

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[122]Reprinted in Walsh, "The American Tour," pp. 191-192.

1832 he began receiving invitations to visit America--specifically Boston. Perhaps believing that here was new fertile territory to spread the "phrenological word," he decided to accept the invitation and left for America from Le Havre, France on 20 June 1832.

Spurzheim as Others Saw Him

It is difficult to find a dispassionate statement concerning Spurzheim the man, and separately, dispassionate statements about Spurzheim the theorist in the literature of the early 19th century. One most often finds statements concerning Spurzheim the man-theorist, i.e., one finds, rather, either passionate statements by those who felt that he and his views were the quintessential representation--the embodiment, if you will--of all that would be forever-after the true philosophy of mind and the salvation of mankind, and, equally passionate statements by those who thought him a fool. If he was subjected to calumny and vituperation on the one hand, his supporters would rally to the rescue on the other. He became, therefore, more than a mere spokesman for a point of view. He became, rather, the personification of the point of view itself. The theory and the man are almost inextricably intertwined in the period literature; and, since this is the case, it is difficult to separate fact from fiction. Glimpses of Spurzheim the man and Spurzheim the theoretician are given in previous sections. The following discussion is designed to briefly add to this in an attempt to gain further understanding. This will be accomplished by the use of commentary's on him which have been gleaned from representative early literature (cf. with Chapter V).

It appears to this writer to be an understatement to

say that Spurzheim was a driven man. Apart from the fact that lecturing was an expected and standard mode of public entertainment during the 19th century, few of us today, I believe, would be inclined to commit ourselves to the rigors of travel as it then must have been to "spread the word" about our personal theoretical beliefs. In addition, Spurzheim's lectures were not designed simply to entertain. One could argue, however, that, since Spurzheim did not hold a University Chair, he lectured publically out of financial necessity. This would be a legitimate suggestion, and that reason cannot be discounted. He did get paid for his public lectures handsomely--even though his estate at his death was rather meagre.[123] As a physician, however, he had the opportunity and potential for establishing a lucrative practice as Gall had done. He probably even could have established such a practice in the vastness of Paris. He chose not to, and no record has come down to us, i.e., to this writer's attention, to indicate that the life of a general practitioner appealed to him (cf. with comments in Chapter V). He was firmly convinced of the truthfulness of his doctrines, was able to convey this to his auditors, and, by doing so, create converts wherever he went. Although those who heard him rarely went away disbelievers, he continually had to contend with calumniators. Furthermore, his mode of operating, and the mode of operating of his followers, is best described as evangelical.

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[123]Ibid.

As late as December 1828 Spurzheim still had to contend with critics who questioned his position in phrenology's history (see earlier discussion of this). In the December issue of the Phrenological Journal and Miscellany (5 (Edinburgh, 1828):422-426), for example, Spurzheim criticizes Fossati who had tried to "diminish" his contributions. There Spurzheim noted that though Gall is the founder of "the physiological part . . . [he] did not make one single discovery after I left him . . . [p. 425]." Spurzheim was criticized often for comments such as the above. He was accused of ingratitude, and, although not specifically so stated, accused of delusions of grandeur, so to speak, in regard to his perception of his own importance in phrenology's history. He never denied, however, that to Gall went the merit for originating phrenology. But, it would be beyond the scope of this writing to attempt to ascertain exactly how much truth there was in his accusations of unfair treatment. To do so might require, for example, some sort of content analysis of the coauthored writings compared to later works which were not coauthored. For simply because the names Gall and Spurzheim appear on the title page of a work does not mean that both authors necessarily contributed equally to it--nor does it mean that the senior author necessarily contributed the most. Contrariwise, the appearance of a single author's name on the title page of a work dealing with subject matter growing out of conjoint labors, does not necessarily mean that the author is presenting his own

discoveries on that subject matter alone. History has awarded Gall the greater merit. This may or may not be justified.

Negative Opinions of Spurzheim

To form a completely fair view of Spurzheim it would be necessary to examine a wider range of opinions than space here permits. Some of the criticism he had to contend with has been previously mentioned, e.g., his famous confrontation with Dr. John Gordon. Other observers were more blunt in their estimate of his character. Samuel Taylor Coleridge, for example gives us the following description:

> Spurzheim is a good man, and I like him; but he is dense, and the most ignorant German I ever knew . . . when he began to map out the cranium dogmatically, he fell into infinite absurdities . . . Spurzheim has, at length, been guilty of some sheer quackery . . . [; however,] here may be some truth in the Spurzheimian scheme . . .[124]

Robert Owen, who knew Spurzheim from the latter's first arrival in England, stated that, although

> . . . Spurzheim . . . [who] was a most conscientious, estimable man, and [who] most certainly . . . has done much . . . to promote a knowledge of the structure of the brain, and to remove much rubbish that was in the way of fair investigation of the human powers . . . knew little compared with what should be known of either the theory or practice of education . . . [N]o man from external appearances alone, can ever do more than make a probable conjecture of the real internal character of the individual . . .[125]

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[124] T. Ashe, ed. The Talbe Talk of Samuel Taylor Coleridge (London, 1903), pp. 104-105.

[125] A. L. Morton, The Life and Ideas of Robert Owen (New York, 1969), pp. 223-224.

William Hazlitt, who once offered to write an article for the Edinburgh Review dealing with Spurzheim in which he could "carve him like a dish fit for the Gods," eventually wrote such a work for The Plain Speaker.[126] Hazlitt was of the opinion that Spurzheim was the "stock example of the learned fool who deceived himself and others with the jargon of a pseudo science."[127] In his article Hazlitt wrote

> Unfortunately for the credit due to his [the "craniologist's"] system, Dr. Spurzheim . . . has very much the air of a German quack doctor. He is, so to speak, the Baron Munchausen of marvellous metaphysics. His object is to astonish the reader [of his works] into belief, as jugglers make clowns gape and swallow whatever they please . . . He readily admits whatever suits his purpose, and magisterially doubts whatever makes against it . . . There is something gross and fulsome in all this [Spurzheim's manner?], that has tended to bring discredit on a system, which after all has probably some foundation in nature . . . I once spent a whole evening with Dr. Spurzheim, and I utterly forgot all that passed, except that the Doctor waltzed before we parted.128

Hazlitt, like Coleridge, seems to be attacking Spurzheim's modus operandi personally--both authorities admit that there might be some truth in the theory itself.

Robert Cox, on that score, saw Spurzheim as a

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[126]R. M. Wardle, Hazlitt (Lincoln, Nebraska, 1971), pp. 153, 311.

[127]H. Baker, William Hazlitt (Cambridge, Mass., 1962), p. 397.

[128]P. P. Howe, ed. The Complete Works of William Hazlitt, 21 vols. (London, n.d.), 12:138-139, 347.

premature systematizer and commented that

> . . . in announcing his [Spurzheim's] discoveries, he details neither the circumstances in which they were made, nor the cases by which they are supported. There has been much controversy on the relative merits of these two physicians [Gall and Spurzheim], in extending the boundaries of phrenology and elucidating the anatomy of the brain [to say the least!].[129]

In all of the above remarks one can easily detect what I observed earlier to the effect that Spurzheim the man was not often discussed separately from "the peculiar theory it was his constant object to defend." Dispassionate would hardly be an appropriate descriptor of most the passages quoted--representing as they do a sample of the calumny which Spurzheim had to contend with. Before the reader becomes convinced that the above quotes contain the only truths, a sample of the views of others more favorably disposed to the man is needed (see also Chapter IV).

Positive Opinions of Spurzheim

Those who had the opportunity of knowing Spurzheim personally generally held very high opinions of him. Unfortunately, for objectivity's sake, those who got to know him best were often those who sympathized with his views--thus, their opinions are confounded by this fact. In his social engagements in Edinburgh with "the most respectable people," for example, he is said to have "excited high esteem by his great talents, great attainments, and unassuming

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[129] Encyclopaedia Brittanica, 8th ed., s.v. "Johann Gaspar Spurzheim" by R. Cox.

gentlemanly manners." In general, we are told, the more one saw him, the more one admired him, the more one realized that he was a "truly . . . great and . . . good man."[130] In 1825 The Medico-Chirurgical Review, warned their readers that while they awarded the "need [meed?] or praise" to individuals like Charles Bell,

> . . . we [the Scotch, they added,] must not be insensible to the genius, talents, and acquirements of an illustrious foreigner [Spurzheim, who] . . . has now divested Phrenology of almost every particular which was capable of being turned into ridicule by the ignorant, the fanatical, and the prejudiced portions of society. He follows nature step by step--founds every principle on the pure basis of observation,--and demonstrates what no physiologist in his senses can now doubt, that the manifestations of the mind depend on the organization of matter, and especially the organization of the brain and nervous system.131

The Lancet around the same period of time wrote--in an introduction to Spurzheim's lectures which were to be reported therein-that they (the editors)

> . . . never listened to the addresses of any lecturer, whose language was so characteristic of candour and truth; indeed we are perfectly satisfied, and here we are sure we shall be joined by all those who have had the pleasure of hearing him.132

Others have reported that his lectures and demonstrations were "highly creditable to him, and satisfactory to [all] those who were present."[133] His success in America alone,

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[130]Gibbon, 1:209.

[131]Quoted in the Phrenological J. and Misc. 2 (Edinburgh, 1825):487.

[132]Ibid., p. 488.

[133]Ibid., p. 489.

in the Fall of 1832, was phenomenal,--apart from the fact that most foreign dignitaries were, during that period, treated with similar, although not as magnanimous approbation (see Walsh, n. 1, and Chapter V).

Robert Dale Owen, "The most distinguished of the four talented sons of Robert Owen"[134] (previously cited), rather than being a bit skeptical about Spurzheim and his system like his father was, put Spurzheim "to the test" in the fall of 1827. Owen had Spurzheim give him a character analysis after Owen had received one from another phrenologist. He then compared the two, and concluded that the "substantial accordance between these two charts . . . gave me somewhat increased confidence in [Spurzheim's] phrenological mapping of the skull."[135] This test was conducted even though Spurzheim's rule, we are told, was to

> Examine no heads of living individuals of respectable standing; and the exceptions to the rule, examinations of well-marked heads, whenever it is evident that the science may be promoted by reporting them, whether in favour of, or adverse to it . . .[136]

Apparently, Owen was either 1) not of respectable standing, or 2) he had a well-marked head. If neither be true, Spurzheim may have done it just for sport (?). In any

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[134]G. B. Lockwood, The New Harmony Movement (New York, 1971), p. 336.

[135]R. D. Owen, "Interesting People Whom I Met in London: A Chapter of Autobiography," Atlantic Mon. 32 (1873):560-572.

[136]"Phrenological Quacks," Phrenological J., n. 92, p. 517.

event, Owen viewed him as quite a cordial chap.

Although all the reviews of Spurzheim's works were not favorable--this is a bit of an understatement in regard to The Edinburgh Review--many were favorable, and the reviewers who were impressed took the opportunity to praise the man also. A reviewer of a Spurzheim work in the American Journal of the Medical Sciences noted, e.g., that

> It is almost presumptuous of us to praise any of the labours of Spurzheim, so widely spread is the well-earned reputation of this rigorous observer of nature . . . [and, since this appeared after his death, the reviewer felt obliged to add:] The prophet is gone, but his mantle is upon us, and we hail with gladness the appearance of this [reviewed] volume . . .[137]

But the adulations an individual receives after his death, one might argue, are not to be taken too seriously--the passion of the moment, after all, is still there. This should not hold true, it seems, however, in a review of the individual's publications--for there is an opportunity in that instance to evaluate only the printed word. The adulations which Spurzheim received after his death in the many reviews which occurred appears to this writer to be a bit extraordinary. Another review, for example, referred to the tragedy of his death as comparable to Goeth's, Cuvier's, Scott's, Bentham's and others of equal merit during the year 1832. To the work of those men we must add, the review went on, "The bold inventive powers, indefatigable

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[137]12 (Philadelphia, 1833):473.

research, and fearless inquiry of a Spurzheim."[138] Park Benjamin's observations on Spurzheim's character have already been noted (see, e.g., n. 5), and, Carmichael's observations on various aspects of this man have appeared previously. Furthermore, Carmichael did add at the end of his discussion of Spurzheim the man a remark which is reminiscent of Lavater's idea (Chapter II) that a good physiognomist must have a good head. Carmichael stated

> It may be added . . . that . . . [Spurzheim] was tall and muscular, and of large and powerful frame. His countenance was illuminated by his mind. It was open and generous, honest and benevolent; and one of his votaries has remarked, that his head afforded the finest specimen that could possibly be selected, to sustain the doctrine to which he had devoted his life.[139]

To these remarks we may add those of Nelson Sizer, a post Spurzheimian popular phrenologist. According to Sizer

> [Spurzheim] . . . had a tender and affectionate spirit which won the love of woman [sic]; a gentleness which gained the confidence of children; a strength of moral feeling, a massive and cultivated intellect, and a manly dignity which commanded the respect of great and good men.[140]

Nahum Capen, also previously cited, was Spurzheim's American publisher (see, e.g., n. 1 and n. 6). Although the New England Magazine was critical of the "indiscriminate adulation"

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[138] "Dr. Spurzheim's Works," Boston Literary Mag. 1 (1833):435-440.

[139] Carmichael, p. 51.

[140] N. Sizer, Forty Years in Phrenology; Embracing Recollections of History, Anecdote, and Experience (New York, 1882), p. 382.

in which Capen's memoir of Spurzheim in the latter's Physiognomy (1833, n. 6) was written--noting that they were "repeatedly moved in reading it, to cry with the Pagans of Lystra: 'The gods are come down to us in the likeness of men'"--[141]his personal accounts of the man are the only first hand accounts of Spurzheim available (other than those previously cited). In his Reminiscences of Dr. Spurzheim (a later work, n. 1), Capen gives us a view of Spurzheim which is partially consonant with the type of flowery adulation the New England Magazine referred to, but not totally so. "It would be difficult to describe . . . [Spurzheim's] person and presence," Capen tells us,

> An interview with him was, indeed, 'A feasting presence full of light.'
>
> His cordial greeting, his inimitable smile and dignified suavity were irresistibly captivating. In him there was 'A combination and a form, indeed, / Where every god did seem to set his seal, / To give the world assurance of a man.'
>
> He was tall--about six feet in height --and well proportioned, The picture of vigor and good health, and had a countenance beaming with superior intelligence. He was slow and graceful in his walk, and, without the air of uneducated curiosity, he appeared to see everything that was peculiar or had a meaning . . . [Capen then quotes another writer to the effect that] 'no one would be likely to meet him without being inclined to turn to look after him, and to inquire his name.'. . . he seldom indulged in remarks without giving instruction. His language indicated a ready knowledge of men and things . . .[142]

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[141]New England Mag. 5 (1833):79.

[142]Capen, Reminiscences, p. 11.

I believe that one must conclude, as did Benjamin Silliman, that here was a man of extraordinary ability, genius and charm. He was loved, respected, and, all too often exhalted to the status of a prophet. But he was also seen by many as a charlatan who was attempting to dupe the public. To say the least, he was not ignored. Regardless of the opinion we have today concerning his doctrines, I am inclined to believe that if he were alive today we would find him stimulating and charming also even though we might question the truthfulness of his views. As Silliman once so aptly stated:

> . . . no person ever visited the United States [to 1833], who, . . . possessed the power at once so fully to excite and absorb and gratify the public mind, and at the same time to surpass the public expectation. In every place where he stopped, he inspired respect and kindness . . . [His death] was one of those thunder strokes, which, in the full career of life, bring us up with a sudden check, and throw us all aback. Every man, especially, who presses onward in the habitual pleasure of intellectual effort, and who lives less for himself than for his fellow men; less for the idolatry of his own poor fame than for the honor of his maker; every such man, feels, on an occasion like this [Spurzheim's death], a momentary paralysis of his powers, and is, for the time, disposed to cease from the vain struggles of life . . . [In any event, one most certainly can say for sure,] "Indeed, the professors were in love with him."[143]

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[143] B. Silliman, "Obituary Notice of Dr. Gaspar Spurzheim," Amer. J. Sci. and Arts 23 (New Haven, 1833): 356-357, and B. Silliman quoted in Capen, Reminiscences, p. 9.

Spurzheim's Systematic Phrenology

It is generally conceded by writers on the history of phrenology, both during the 19th and 20th centuries, that it was Spurzheim who "being cast in a . . . more metaphysical mold than that of Dr. Gall," was responsible for the systematization which occurred after Gall's original discoveries were announced. More often than not, however, historians have taken this fact as a point of departure to criticize what Spurzheim had done, i.e., the argument runs something like the following: Since Gall, we will all admit, was an outstanding anatomist and made lasting contributions in that area of inquiry, we can forgive him somewhat for his more eccentric ideas regarding, e.g., the external surface of the cranium and its relationship with the brain and cerebral functioning--after all, it was sort of logical in a sophomoric sort of way. Spurzheim, on the other hand, was a mere disciple, an opportunist who picked up and elaborated and systematized Gall's views to the point of absurdity. He even had the effrontery (the "gall") to think that he could improve what his teacher had done. One ignorant mistake we can overlook, but when it is expanded to more than that--"he even added more faculties"--its sheer blasphemy. One tends to forget that what Spurzheim did do was a logical extension of what Gall began. The fact that he used the word "phrenology" to describe his system--a word which

conjures up passionate prejudicial defenses among psychologists today--is neither here nor there. The word seemed to fit the subject matter at the time. Even Boring found it necessary to criticize Spurzheim--Spurzheim, he said, "was more of a propagandist than a scientist." He also added, however, that Spurzheim "was influential . . . in dignifying phrenology by bringing it more into relation with the respectable traits of mankind . . . [and, it was he] who first saw its more important social relations to society"--in the process teaching Gall "the importance of this extension."[144] It was this dignification of phrenology and these "more important social relations" which Spurzheim developed that have been lost in the historical backwash.

A complete list of the faculties admitted by Gall, their French, German, and English equivalents, Spurzheim's new nomenclature, his additions, and the cranial and cortical localization of the faculties are given in Appendix B. It will not be necessary to elaborate on those here. The basic phrenological assumptions have been given in Chapter II, under Gall, and, these basic assumptions were not changed by Spurzheim. Spurzheim did make alterations along other lines, but the tenets of the system as laid down by Gall remained unchanged. Bakan suggested that there were three

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[144]E. G. Boring, A History of Experimental Psychology, 2nd ed. (New York, 1950), p. 53.

broad hypotheses under which phrenologists operated,[145] but Fowler's summary is more complete (although his other activities in phrenology are more dubious). The assumptions under which phrenology operated were as follows:

1. The brain is the organ of the mind, or that corporeal instrument which the mind employs in the exercise of thought and feeling. . . .

2. The mind consists of a plurality of innate and independent faculties--a congregate of separate, primary powers. . . .

3. The brain consists of as many different portions or organs, as the mind does of faculties. . . .

4. The various faculties of the mind are possessed, originally in different degrees of strength by different individuals, and also by the same individual. . . .

5. There exists a reciprocal proportion between the relative strength and power of the various mental faculties, and the size of those portions of the brain, or those organs, by which they are severally manifested. . . .

6. The shape of the brain may generally be ascertained by the form of the scull [sic]; . . .

7. The history of the discovery of phrenology, furnishes ample demonstration of its truth. . . .

8. The truth of phrenology is mainly supported by an appeal to the demonstrative evidence of physical facts.[146]

To Spurzheim's alterations of Gall's system we must now turn.

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[145] D. Bakan "Is Phrenology Foolish?," Psychol. Today, May, 1968, 44-51; cf. however, his more scholarly article "The Influence of Phrenology on American Psychology," J. Hist. Behav. Sci. 2 (1966):200-220 and A. A. Walsh, "Is Phrenology Foolish? A Rejoinder," J. Hist. Behav. Sci. 6 (1970):358-361.

[146] L. N. Fowler, O. S. Fowler, & S. Kirkham, Phrenology Proved, Illustrated, and Applied (Philadelphia, 1839), p. 7.

Early Revisions of Gall's System

By the time Spurzheim wrote The Physiognomical System (1815), he had "admitted" thirty-three faculties. Although Gall is generally credited with having "discovered" twenty-seven faculties, Spurzheim only gave him credit for the discovery of twenty-six. Spurzheim was of the opinion, for example, that Gall's "sens des mots," "memoire verbale" (or "wort-gedaechtniss"--i.e., verbal memory) was confounded by Gall with the faculty "sens de langage de parole," "talent de la philologie" (or "Sprach-forschungs-sinn"--i.e., faculty of spoken language), i.e., Gall felt that there were two separate "language" faculties. Spurzheim, however, "admitted" that

> . . . some persons learn easily the spirit of different languages without having a great memory of words, and that other persons easily acquire words without knowing the spirit of any language [Gall's argument for two faculties];147

but he could not accept "logically" the necessity for two separate cerebral organs to account for this. "Yet," he concluded,

> it seems to me, that the memory of particular words, and philology in general, are grounded upon the same general faculty . . . . I admit [, therefore, he concluded,] only one organ of language; and its respective faculty produces similar phenomena in respect to languages or arbitrary signs, as every other intellectual faculty does in respect to external impressions. It makes us acquainted with arbitrary signs, has memory of them, judges of their relations,

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147 Spurzheim, The Physiognomical System, 2nd ed. (1815), p. 376.

> and produces a propensity to the employment of these functions.[148]

A second faculty which Spurzheim felt Gall confounded involved, in this case, two organs in one, i.e., Gall saw one faculty as operating in two ways where Spurzheim was of the opinion that there should be two separate cerebral organs for the one Gall described. Gall's organ No. 8, "hauteur," "orgueil," ("Stolz," "hersch-such,"--i.e., pride, good opinion of oneself, etc.) was the organ from which, wrote Gall, "arrogance, disdain, self-sufficiency, presumption, insolence, &c. [in man] are all derived."[149] After his discovery of this organ, Gall had sought to confirm it--or examine it further--to determine if animals who were known for their pride, e.g., race horses, peacocks, and others, had this organ also. He "discovered" that they did not, but, he did "discover" that

> . . . in those [animals] which voluntarily remain in the higher regions of the air, living on mountains, and other elevated situations; such as the roe-buck, chamois, wild goat, and some species of eagles and falcons . . . [had] the cerebral parts in question . . . more developed, and the elongated prominence the most saliant, in proportion to the greater height of the dwelling-places of the animals.[150]

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[148] Ibid., and p. 386.

[149] F. J. Gall, On the Functions of The Brain and of Each of its Parts, Trans. W. Lewis, 6 vols. (Boston, 1835), 4:157 (see n. 10, Chapter I, for complete title).

[150] Ibid., p. 171.

Strictly speaking, what Gall was contending was

> . . . that the point where both organs are situated, viz., the organ of self-esteem [Spurzheim's term] in man, and the instinct to physical height in animals, is in the same part of the head . . . [adding] that this faculty is not the only one which, although physical [sic] in animals, . . . grows moral and Platonic in mankind.[151]

Spurzheim was of the opinion that the arguments which Gall presented in support of his contention were weak and concluded by stating

> . . . I separate the instinct which carries animals to physical elevation from the sentiment which produces self-love and pride, and I seek for two different organs . . . [I]t seems to me that there is a particular faculty, and a special organ, which determines the dwelling of animals . . . . It is difficult . . . to point out the seat of this organ . . . [Its] place . . . is merely conjectural, and must be verified in the same way as that of every other organ. This propensity, however, is common to the greater number of animals: hence its organ must be deep seated in the brain.[152]

Thus, Spurzheim separated Gall's single faculty into two, leaving the location and the confirmation of the one function --inhabitiveness--to later research. By the time the fourth edition of his work appeared (Boston, 1832), the location of "inhabitiveness" was still open to question. Spurzheim wrote then that he was mentioning his speculations in regard to that organ "only to excite [further] investigation," not to suggest that that organ even then (seventeen years after his first statement about it, was "by any means . . .

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[151]Spurzheim, The Physiognomical System, p. 291.

[152]Ibid., p. 297.

certain and established."[153] Recently Cohen has indicated that these early phrenological speculations about territorial instinctual behavior--i.e., the propensity to inhabit this as opposed to that place--are certainly comparable to the current ethological speculations regarding the "territorial imperative." See his work for further speculation regarding this and the other organs in regard to current behavioral concepts.[154] "Self-esteem," however, was considered "established" on the basis of a "number of proofs." Thus, with Gall admitting two faculties to Spurzheim's one, and vice versa, both men agree on the number of faculties as being twenty-seven. Spurzheim continued with his revision, however, and ultimately "established" or thought "highly probable" thirty-seven cerebral organs. The ten additions which Spurzheim made are as follows:

1. "organ of hope"--Spurzheim felt that there was a need for, this particular "sentiment." "Gall" he told us, "considers hope as belonging to every organ . . . I consider this sentiment as proper to man [alone] . . . In religion it is called faith. Persons endowed with it in too high a degree are credulous." In 1815, confirmation of its existence required "future examinations." By 1832, it was established;[155]

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[153] J. G. Spurzheim, Phrenology, or The Doctrine of The Mental Phenomena, 2 vols. (Boston, 1832) 1. I use here, however, this same work in the one volume (1908) Philadelphia ed. (from the 2nd Amer. ed. [1833]), p. 191.

[154] J. Cohen, Personality Assessment, Eyewitness Series in Psychology (Chicago, 1969), p. 52.

[155] Spurzheim, The Physiognomical System, pp. 344-345, & Spurzheim, Phrenology, pp. 240-241.

2. "organ of conscientiousness"--In 1815 Spurzheim wrote, "I think also that there is a particular sentiment of just and unjust, right and wrong, and that a particular organ of justice must be admitted. No animal has this faculty . . . Gall thinks that there is no organ of conscience . . . according to him, there are as many consciences as faculties . . . Thus I admit [as almost "established"] a particular organ of justice, and it seems probable [in 1815] that it is situated on the sides of the following organ [firmness]."156 By 1832, this organ too was no longer simply probable--it was "confirmed."157 Furthermore, this faculty was included by Gall in his No. 24, "sens morale," "conscience," "moralisher-sinn"--i.e., benevolence, etc.;158

3. "organ of marvellousness"--By 1818 the cranial map frontispiece in Spurzheim's works had shown some slight changes in the position of some of the cerebral organs. At that point, in his Observations sur la Phraenologie (Paris, 1818), he admitted a new organ anterior to "hope," termed, "organe de la surnaturalite"--i.e., supernaturality. "Je propose," he wrote in 1818, "ce nom pour designer un sentiment de l'homme, qui cherche et voit en tout le surnaturel" (p. 207). In 1825 (i.e., by 1825) he changed the name of this organ to "marvellousness." At that point he wrote in his Phrenology, or the Doctrine of the Mind (London) that "the existence of this feeling is certain . . . it is principally manifested by a belief in miraculous and supernatural circumstances. In disordered states, this organ constitutes a "species of insanity";

4. "organ of size"--It remained for George Combe to state that this organ was only probably--i.e., not "established."159 In 1818 Spurzheim had located an organ laterad and inferiad from the nasion on the internal angle of the orbit which he called "organe de l'entendue." Prior to this, however, in the 1815 Physiognomical System (n. 47) he had discussed this organ--and the following one--

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156 Spurzheim, The Physiognomical System, pp. 346-352.

157 Spurzheim, Phrenology, p. 240.

158 Gall, On the Functions of the Brain, 5:174-182.

159 G. Combe, A System of Phrenology, 6th Amer.ed. (Boston, 1839), p. 368.

without numbering them and without labeling the sections under which they were discussed (as he did with all other organs and sections). On page 359 of that work he discusses the "organ of form" (No. XX), he discusses "size" on Page 360 and the next organ on page 361. Although both are listed as organs in the index (p. xv), and although "colouring" (No. XXIII) is discussed on page 362, the numbers XXI (for "size") and XXII (for "weight and resistance" [see below] for some reason were allowed for but not included. Spurzheim took this indirect route, it seems, to state that these two organs were only probable. By 1825 "size" was placed in the position as described for "organe de l'entendue" above. No such labeling had appeared in 1815. He offers no "proofs" of this organ's existence; and, his discussion of it in 1832 is as lacking in "support" as his earlier ones. He states simply that it "is important to geometricians, architects, carpenters . . . and to everyone who measures dimensions";[160]

5. "organ of weight and resistance" (See discussion for no. 4 above)--"This faculty," wrote Spurzheim, "procures the knowledge of the specific gravity of objects, and is of use whenever weight and resistance are worked upon with the hands, or by means of tools . . . I consider the power in question as destined only to procure notions of gravity and resistance . . . the effect of intoxication may be attributed in a great measure to its deranged functions . . . its sphere of activity . . . [is] beyond the meaning of the term equilibrium";[161]

6. "organ of order"--this organ and the following one ("Time") were treated in the same tentative way as no. 4 and no. 5 above were in 1815. They were not located at that time but in later editions of Spurzheim's works were ultimately "established." The "organ of order" "gives method and order to objects only as they are physically related . . . The faculty here discussed is merely fond of putting particulars in order according to physical considerations";[162]

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[160] Spurzheim, Phrenology, p. 317.

[161] Ibid., pp. 318-319.

[162] Ibid., p. 326.

7. "organ of time"--This organ as was mentioned above was tentative in 1815--"established" by 1818. "The faculty of time conceives of the duration of phenomena, their simultaneousness, or succession";[163]

8. "organ of eventuality"--Spurzheim contended "that Gall . . . [attributed] to a single faculty ["individuality"] manifestations which depend on intellect generally."[164] Spurzheim felt that there should be two faculties for this and added the one being discussed here. "This faculty recognizes the activity of every other, whether external or internal, and acts in its turn upon all of them. It desires to know everything by experience, and consequently excites all the other organs to activity . . . Its sphere of activity is very great, and expressed by verbs in their infinitive mood";[165]

9. "Desire to live," or "Vitativeness"--Spurzheim does not tell us much about this organ other than it is "highly probable" (by 1832) and is located "between the posterior and middle lobes, inwardly from combativeness";[166] and,

10. "organ of the propensity to feed, alimentiveness" --Gall and Spurzheim in much the same manner as modern physiologists considered that feeding behavior, depended "on a cerebral portion" of the brain as opposed to the viscera. Like every other organ, Spurzheim contended (in 1832), this organ, "though indicated by reason and comparative anatomy, is merely probable, and can be confirmed or rejected . . . according to direct observations alone . . ." [these last two organs were not considered to have been discovered by Spurzheim].[167]

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[163] Ibid., p. 329.

[164] Ibid., p. 328.

[165] Ibid., pp. 328-329.

[166] Ibid., p. 160.

[167] Ibid., p. 162-163.

The reader is referred to Appendix B for further comparison of Gall's and Spurzheim's systems. Chart 1 is a stylized representation of Spurzheim's system after Ackerknecht and Vallois.[168] The + after some organs indicates that they are common to man and animals. Others were considered questionable, i.e., it was uncertain whether they were common to man and animals. Gall's numbers are given in parentheses--note that some organs were considered double by Gall (e.g., Spurzheim's No. 33), and others were considered single by Gall and double by Spurzheim (e.g., Spurzheim's Nos. 25 and 30, cf. with Appendix B, Part II. For a description of the function of each organ, see Appendix B, Part III).

Apart from discovering new cerebral organs, and revising what were perceived as being misperceptions on Gall's part in regard to some of them, Spurzheim made additional changes in the organology as laid down by Gall. He contended, for example, that Gall's approach to the determination of the cerebral organs was faulty (see Chapter II). Gall, Spurzheim wrote, "followed only the empirical method, that is, he looked for organs according to the active functions of man." Spurzheim felt that "the actions do not always indicate the special faculty; and that there are very few actions which result from one of these faculties."[169]

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[168] Ackerknecht and Vallois, pp. 84-85.

[169] Spurzheim, The Physiognomical System, p. 273.

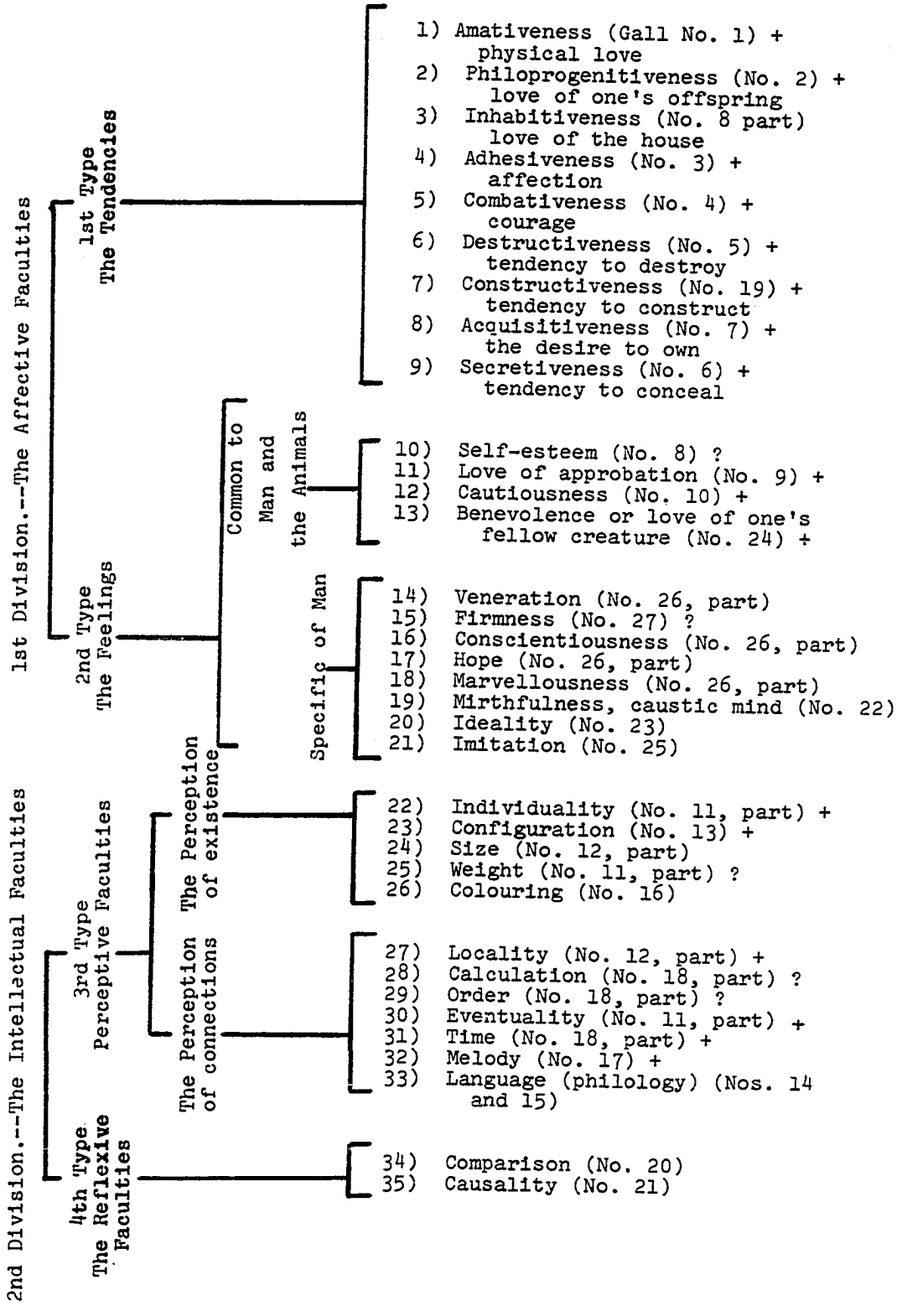

CHART I

SPURZHEIM'S CLASSIFICATORY SYSTEM OF THE PHRENOLOGICAL ORGANS

Adding to the assumptions that 1) "the brain is the organ of the mind;" 2) "the mind manifests a plurality of powers through as many organs"; and, 3) "the size of an organ, caeteris paribus, is the measure of the power of its faculty,"[170] Spurzheim contended, in contradistinction to Gall's procedure, that "it is necessary to point out a particular organ for every faculty" (or, stated another way, "that is a primitive faculty")

1. which exists in one kind of animals and not in another;
2. which varies in both sexes of the same species;
3. which is not proportionate to the other faculties of the same individual;
4. which does not manifest itself simultaneously with the other faculties, that is, which appears or disappears earlier or later than the other faculties;
5. which may act or rest alone;
6. which alone is propogated in a distinct manner from parents to children; and
7. which alone may preserve its proper state of health and disease.171

"Gall," according to Spurzheim, "did not determine any organ in conformity to these [aforementioned] views."[172] "[E]ach animal or man," Spurzheim wrote, must be studied "individually."[173]

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[170][N. B. Shurtleff ?], An Epitome of Phrenology; Being an Outline of the Science as Taught by Gall, Spurzheim and Combe: to Accompany a Chart Delineated According to this System, or the Marked Bust Approved by Spurzheim (Boston, 1835), p. 23.

[171]Ibid., p. 26.

[172]Spurzheim, The Physiognomical System, p. 273.

[173]G. Spurzheim, Outlines of Phrenology Being Also a Manual of Reference for the Marked Bust (Boston, 1832), p. 13.

Another change which Spurzheim wrought involved the way the organ's functions themselves were perceived. Gall had compared "cerebral parts" with "determinate characters" and particular talents--thus, for example, he spoke of an organ of murder, another of music, one of mathematics, etc. Spurzheim felt that this too needed modification. As he stated

> It was necessary to modify . . . [Gall's] manner of considering Phrenology. I undertook to specify the nature of the fundamental manifestations of the mind and to name the powers independently of any action, or application; and I established a new division of the mental operations, according to the nature of special powers, and modes of action, separating in the talents and characters of individuals, that which belongs to each power itself from what depends on its combination with other faculties. . . . I consequently do not give names to the organs according to actions, but solely according to the nature of the faculties.[174]

The change in nomenclature referred to above is the type of change which Boring referred to earlier when he suggested that Spurzheim made phrenology more dignified and brought "it more into relation with the respectable traits of mankind" (see n. 144 and its referent). Although Spurzheim was criticized by some early reviewers for what they perceived to be his development of cumbersome, pedantic neologisms to describe the phrenological organs, the terms he proposed were not brazenly presented to the public. In the preface to The Physiognomical System (1815, n. 47) Spurzheim apologized for "my daring to introduce new words," and he

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[174] Spurzheim, Phrenology, pp. 149-151.

foresaw that the reviewers would be critical of that procedure. He felt, however, that the English language did not provide the terms he needed; and, as a result, he had to speak in "circumlocutions" to explain his meaning. Thus, he formed his new terms (new nomenclature) "in agreement with the spirit of the language."

To designate that a cerebral organ was a "propensity," he employed the termination "ive" indicating "the quality of producing," and "ness" to indicate the "abstract state." "iveness" was joined to "different roots of fundamental words," and preference was given to English words already admitted to the language. Where this was not possible, he chose Latin participles. Throughout all the nomenclature, as was previously mentioned, Spurzheim sought "for names which indicate the faculties, and by no means any determinate actions, whether in their use or abuse." Thus he ended up with terms such as "destructiveness"--the propensity to destroy; "amativeness"--the propensity toward physical love, and so on. The propensity to love one's offspring gave him greater difficulty and he coined the term "philoprogenitiveness"--one of the most ofttimes criticized terms. The termination "ous" was used to indicate a "sentiment, as anxious, cautious, pious," etc. When adjectives were found in the language for the "primitive sentiments" Spurzheim simply added "ness" to the end, as "cautiousness," "conscientiousness," etc. (see Appendix B). The "intellectual faculties," Spurzheim felt, required no

neologistic manipulations. The new nomencalture was successful at the time even though Ackerknecht and Vallois were of the opinion that "some of Spurzheim's terms are not very successful neologisms."[175] I am not aware on what basis they made that judgment--they do not elaborate. In any event, I do not concur.

Later Additions to Phrenological Theory

To do justice to Spurzheim's unique theoretical position including a detailed analysis of his theories would not only require a separate and rather lengthy chapter, but, most likely, would probably require a separate work all together. It is an understatement to comment that such a lengthy treatment would be superflous to the task at hand here, and impossible to justify other than for pedantic purposes--which are rarely justifiable (except, the writer concedes, in dissertations--but not this one). In any event, as the reader can gather from a perusal of the titles of Spurzheim's works which were previously mentioned, he extended phrenological thinking into the areas of mental illness, philosophy, education, physiognomy and so on. While a detailed discussion would burden the reader with unnecessary esoterica at this point as was already stated, only a brief discussion of Spurzheim's excursions into theory elaboration and practical applications of his views will be included. For, the tenets of phrenology which were

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[175]Ackerknecht and Vallois, n. 23, p. 84.

later tested by organized societies formed for that purpose, were the basic assumptions on which phrenology rested which have already been mentioned--few argued with the utility of some of the "practical applications" which developed therefrom, regardless of the truthfulness of phrenology's doctrines. In the clinic and the school in the early 1800's as is often the case today, if something--a method, an approach, or an idea--worked (or seemed to work), it was used. Phrenology seemed to work.

As was mentioned earlier in the chapter, Spurzheim extended particular sections of The Physiognomical System (n. 47) by rewriting them as separate works. These extensions allowed him to elaborate not only his particular opinions regarding the nature of mind, but also, more importantly, to demonstrate how the "new psychology" could be applied for the improvement of mankind. Spurzheim never intended that his system become practical in the sense that it ultimately became "practical"--i.e., he would have turned over in his grave if he saw what the phrenological Fowlers did with his ideas after his death (alluded to in Chapter V). He would have turned over, that is, when he saw his life's work turned into a "profession" in which ersatz "doctors" of the "new science" examined heads for fees, added new organs seemingly at random, and created a veritable monster which eventually died by its own hand. Both Stern and Davies have discussed these later events quite

well.[176] By "practical" Spurzheim meant "applied" to the amelioration of mankind--not "used" for the carnival-like acquisition of personal financial gain. One of the avenues in which Spurzheim felt that phrenology could be particularly useful was in the explanation and treatment of insanity; and, his work on this subject published in 1817 is one of the earliest in this field. Recently, it has been republished in facsimile with a brief introduction by this writer (Gainesville, Fla., 1970, n. 6). Although it is unfair to Spurzheim to try to summarize his complete views on insanity in a few paragraphs, some of his ideas will serve to indicate the tenor of his approach.

For Spurzheim, "insanity might be defined an aberration of the manifestations of the mind from their state of health";[177] however, he was aware (since he wrote in the conditional), that "that definition . . . could have a determinate meaning only for those who have a previous knowledge of the operations of the mind in the healthy state."[178] He was aware, furthermore, of the problems of defining insanity, and restricted himself in much of his

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[176] M. B. Stern, Heads and Headlines: The Phrenological Fowlers (Norman, Oklahoma, 1971), and reviewed by this writer, J. Hist. Behav. Sci. 8 (1972):439-441, and, J. D. Davies, Phrenology Fad and Science: A 19th Century American Crusade (Hamden, Conn., 1971).

[177] Spurzheim, Observations, n. 6, p. 49.

[178] Ibid.

discussion to its importance for medical jurisprudence. In what then does insanity consist for Spurzheim? He tells us that

> . . . insanity, in my opinion, is an aberration of any sensation or intellectual power from the healthy state, without being able to distinguish the diseased state [i.e., without insight on the patient's part]; and the aberration of any feeling from the state of health, without being able to distinguish it, or without the influence of the will on the actions of the feeling. In other words, the incapacity of distinguishing the diseased functions of the mind, and the irresistibility of our actions, constitute insanity.[179]

The total work from which this definition is extracted allowed Spurzheim considerable space to elaborate on the major problems of defining this condition. He rejects the term "madness" as an appropriate appelation for his subject matter; he rejects "lunacy . . . because the moon does not at all produce such complaints"--Benjamin Rush suspected that there was such a relationship--,[180] he rejects the term "mental derangement" and settles on "insanity" reiterating that "either the incapacity of distinguishing the diseased functions of the mind, or the irresistibility of our actions, or both together, characterize insanity."[181]

Although in The Physiognomical System Spurzheim contended that considerations regarding insanity are the special province of physicians, he began his discussion of insanity

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[179] Ibid., p. 53.

[180] Ibid., p. 57; and B. Rush, Medical Inquiries and Observations, Upon the Diseases of the Mind (New York, 1962 [1812]), pp. 170-173.

[181] Spurzheim, Ibid., p. 57.

in his Outlines (n. 173, p. 87) by noting that physicians are not the only ones fitted to "decide the truth or falsehood of phrenology." In this latter source he tells us that

> As insanity deprives individuals of their social rights, and produces inconveniences of the gravest nature, its definition must be given in relation to medical jurisprudence, rather than to the healing art. Insanity [, therefore,] is that peculiar state of the mind which is attended with the loss of moral liberty;[182]

adding in summary that insanity

1. is usually partial, seldom general;
2. is intermittent or continued;
3. is always corporeal, i.e., every cause of insanity is corporeal;
4. is hereditary;
5. occurs variously at different ages--very young and very old people are 'less exposed to become insane';
6. 'is more frequent in women than in men . . . The cause certainly cannot be ascribed to their [immaterial] minds';
7. is influenced by climate;
8. is influenced, i.e., potentially caused by, disturbances in general bodily health, dissipation, intoxication, etc.;
9. often is accompanied by, or alternates with corporeal disease, 'insanity sometimes alternates with intermittent fever, with epilepsy, &c.'; and,
10. often induces disturbances of sleep.[183]

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[182] Spurzheim, Outlines, p. 88.

[183] Ibid., pp. 87-92.

Spurzheim ends his treatise by discussing "moral treatment," and the "principle requisites of a mad house," and so on, including such details as plans for the grounds, buildings, how to occupy patients' time and the like. It is an admirable effort, edited in its first American edition (1833) by the distinguished founder of The American Journal of Insanity (1844)--now The American Journal of Psychiatry--Dr. Amariah Brigham, a phrenology sympathizer. The three major points which Spurzheim may be said to have made regarding insanity, viz., 1) that insanity was organically based; 2) that it was the result of faulty cerebral organization or disease; and, 3) that it could be corrected by sympathetic treatment coupled with re-education, were far reaching in the early development of psychiatric thought. This is discussed in Carlson, who deals particularly with phrenology's influence on American psychiatry.[184]

In The Physiognomical System (n. 47, p. 552) in a discussion of education Spurzheim was quick to point out that since all the faculties of the mind are innate, and their manifestations depend on particular organs,

> . . . education can take place only where the faculties, and the conditions of their manifestations, exist; for education is nothing but exercise, cultivation and direction [of the faculties of the mind].[185]

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[184]E. T. Carlson, "The Influence of Phrenology on Early American Psychiatric Thought," Amer. J. Psychiat. 115 (1958):535-538.

[185]Spurzheim, The Physiognomical System, p. 552.

These early ideas were developed further in his A View of the Elementary Principles of Education Founded on the Study of the Nature of Man (Edinburgh, 1821, reissued in Paris, 1822).

Spurzheim taught that man was capable of improvement thrcugh cultivation and "exercise." He did not propose that one could change his inherited state; rather, he contended that through education, one could, in a sense, actualize all the good potential one had and by doing so perfect his condition. His whole philosophy here is based on his conception of the natural laws. Essentially, he believed that man was governed by natural, i.e., biological, as well as moral and physical laws. Infringement of the laws by parents, for example, would result in offspring who were poorly organized, not just physically, but, cerebrally as well. The first concern of society therefore, he contended, should be to understand the natural laws, avoid their infringement, and thus, improve the character (cerebral organization) of their progeny.

Spurzheim quite early emphasized the importance of individual differences, and was adamant in his view that education must be approached on a person by person basis. In doing so, however, he rejected Rousseau' maxim's regarding education:

> If Rousseau had taken care of his children, instead of sending them to the public hospital, he would have detected his erroneous conceptions [, Spurzheim wrote on one occasion,] he would

> have observed, that nature implants certain kinds of feelings; that education only weakens, or invigorates and refines them; that children react on external circumstances, according to their natural dispositions; and it is necessary to adapt education to the nature of individuals.[186]

After dealing with the laws of hereditary descent and the laws of vegetative functions--the latter are approached developmentally and deal with the importance of, e.g., temperature regulation of the body and food intake--Spurzheim deals with the laws of exercise, "education in a more limited sense." In this section Spurzheim makes some curious, and probably speculative comments. While it is known that he observed children during his tours, in schools and special homes, it is not generally known that he made developmental processes a special study. Yet throughout his work on education he makes developmental-processes-related statements. In one place, for example, he suggests that the mental faculties of "individuality, form, eventuality, comparison, and language appear first" in terms of a child's cognitive processes. These are followed successively by "size, colouring, locality, number, order, time and tune."[187] He argues that in the education of a child, therefore, the educator should remain cognizant of these developmental changes and structure the child's education accordingly.

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[186] G. Spurzheim, A View of the Elementary Principles of Education, Founded on the Study of the Nature of Man, 5th Amer. ed. (Boston, 1836), pp. 14-15.

[187] Ibid., p. 118.

But in sum, his views on education are best stated in his own words:

> Let it first be understood, in what the perfectibility of mankind consists. Man can never be deprived of a primitive power or made to acquire another; Phrenology admits one species of man, endowed with a certain amount of fundamental powers; but these individually are more or less active in different races or in different individuals of the same race . . . The activity of the special powers may be increased or diminished, and their actions regulated; and, to this the perfectibility of man is confined . . . The education of man comprehends all that conducts to the cultivation of his nature; that is, the faculties of his body and of his mind, from the moment of conception to that of death, in the healthy and diseased state . . . [I]f the true means of excitement [education] and those of direction be employed, arts and sciences might be improved, moral evil be diminished, and mankind in general brought nearer to their destination.[188]

In discussing physiognomy, Spurzheim came to terms with what one can imagine was the suggestion that his and Gall's system was similar to Lavater's. He treated physiognomy in a separate work in 1826 (reissued in 1833, n. 6) which at the time was designated as " Part I. Characters." This volume developed his ideas regarding the external signs of the affective and intellectual faculties as determined by the size and configuration of the "hard parts" of the body. It was considered to be "Part I." of (probably) a two-part work, and, since its focus was on physiognomical "characters," most of the work is concerned with characterological descriptions of famous personages, e.g., "Nero and

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[188]Spurzheim, Outlines, pp. 94-96.

Seneca," "Joseph Priestly, and Richard Price," "Cicero and the Gladiator," "Martin Luther and Melancthon," and so on. The second volume of the work which Spurzheim planned to write was to focus on "pathognomy," the study of the physiognomical signs of the affective and intellectual faculties of man as indicated by the motions of the "soft and flexible parts" of the body. The reader may recall from Chapter II that Lavater also drew such a distinction. For Lavater, however--and this is probably what Spurzheim was attempting to clarify--, physiognomy was the study of the powers, inclinations, and character of man at rest, pathognomy was that same study of character in motion. Spurzheim used the word physiognomy in its true etymological meaning--signifying the study of nature at large--as well as in its more common meaning to designate the configuration and the expression of the countenance, and to imply a knowledge of the external signs which proclaim internal qualities. He was seeking the external signs of the mental faculties, Lavater, the reader may recall, was seeking the external signs of character. The distinction is a subtle but important one. Furthermore, Spurzheim accepted the Galenical theory of the temperaments, and, it was probably as a result of this emphasis that later developments in phrenology made a knowledge of the temperaments an important addition to the phrenological theorists cache of perceptual tools for characterological studies.

It should be reiterated here, however, that Gall too had dealt with physiognomy and pathognomy in his great work (n. 149). For Gall, the distinction between his form of physiognomy and Lavater's was based on the fact that Lavater was "not at all guided by the knowledge of anatomy and of physiology; the laws of the organization of the nervous system in general; and of the brain in particular" as was Gall (cf. with discussion in Chapter II).[189] Pathognomy for Gall, as it was for Lavater and Spurzheim, referred to the "act of judging a person by his gestures, by the whole habit of his body."[190] For phrenology, however, pathognomic activity was viewed as the "natural language of the faculties." Gall had proposed that it was possible to judge and divine the expression of each singular organ. Spurzheim concurred! Twelve general principles summarized the pathognomic activity of the organs, viz.,

1. The organs, which have their seat in the inferior regions of the brain, when they act with energy, carry the head downward, depress and shorten the body;

2. Those of the organs, which are placed in the superior regions of the brain, during their energetic action, elevate the head and the whole body;

3. The organs, placed in the superior posterior regions of the brain, depress the head and the whole body backward and downward;

4. The organs, placed in the inferior anterior regions of the brain, direct the head and the whole body forward and downward;

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[189] Gall, On the Functions of the Brain, 5:262.

[190] Ibid., p. 266.

5. The organs, placed in the superior anterior part of the brain, elevate the head, the body, and carry them forward;

6. The organs, placed at the superior posterior part of the brain, elevate the head, the body, and carry them backward;

7. The organs, placed in the inferior region of the brain, in a perpendicular line with the great occipital opening, depress down perpendicularly the head and the whole body;

8. The organs, placed in the superior region of the brain, perpendicularly above the great occipital opening, elevate perpendicularly the head and all the body;

9. When the twin organs of each function act simultaneously, the head and the whole body move symmetrically from above downward, from before backward, &c., according as the organ which acts, is placed in the anterior, posterior, superior, or inferior region of the brain;

10. When there is only one of the two equal organs, which acts, the head and the body move on the side on which this organ is placed, from above downward, from below upward, from before backward, from behind forward, according as the organ acting is placed in the superior, inferior, anterior, or posterior region of the brain;

11. When the two double organs act alternately, the head and the body perform alternately the motions belonging to their action, sometimes on one side, sometimes on the other; and,

12. When the double organs, having their seat in the perpendicular axis of the brain, act alternately, the head moves on its pivot from right to left, and from left to right, from above downward, and from below upward, according as the acting organ is situated in the superior or the inferior part of the brain.[191]

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[191] Ibid., pp. 269-270.

In the 1835 English edition of Gall's works (n. 149), the discussion of the "natural language" of the "organe de l'amour, ou de la copulation," was discreetly left in the original French, i.e., it was not translated. I will discreetly omit quoting even the French here leaving to the reader's imagination the speculation on how this organ's "natural language" expressed itself (based on the above principles). Fortunately, the absurdity of this pathognomic notion can be illustrated by another example from Gall's discussion of the remaining organs. On the natural language of the organ of "cunning" (Gall's organ No. 6 [see Appendix B]), he tells us

> The organ of cunning is placed in the lower part of the forehead in front, but not altogether in the anterior part. Hence, it follows, that, during the energetic action of this organ, the head and the body must be carried forward and downward. When the double organs act alternately, the head and the body are gently turned from right to left, and from left to right. While turning thus, the cunning man looks aside, and accompanies the movement of his head and body by an analogous movement of his forefinger, which he holds extended. Hence the expression, a low, vile flatterer, a cringing man.192

Although Spurzheim's "part II. Pathognomy[?]" never appeared, it probably would have elaborated on Gall's earlier speculations; for, one does not find a great deal on this subject in Spurzheim's published writings. I believe that we must assume, therefore, that, since Spurzheim did not openly refute these assumptions, he accepted them. In addition,

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192 Ibid., p. 278 (cf. also Spurzheim, The Physiognomical System, p. 401.)

one of the outgrowths of these pathognomic ideas may have contributed to the development of the 19th century entertainment medium, the tableau. Furthermore, one also finds later in that period an interest in the study of gestures for their own sake as was illustrated in the Delsarte philosophy of expression, which prepared public speakers, latent demonstrative conversationalists, and "genteel ladies" for the proper expression of their ideas through body postures, gestures, and movements. See on this the curious book by Warman.[193] A few comments on the philosophical portions of Spurzheim's phrenology will allow this chapter to come to a close. As with the other aspects of his work discussed above, this section will, of necessity, also be brief.

The comment made earlier that Spurzheim was considered to be more "metaphysically oriented" than Gall was meant, in its original meaning, to apply not only to his philosophical interests, but to the fact that he extended Gall's system into practical channels as well. Metaphysical in this loose sense of the word, therefore, meant simply going beyond the anatomy and physiology on which the system was based. In Part IV of The Physiognomical System--designated the "Philosophical; or Psychological Part"--Spurzheim considered the general views of mental philosophy

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193 E. B. Warman, Gestures and Attitudes: An Exposition of the Delsarte Philosophy of Expression Practical and Theoretical (Boston, 1892).

at that point in time (1815) by discussing such issues as mental association, mnemonics, materialism, fatalism, moral liberty and so on. In 1820 his Essai Philosophique appeared (n. 8), in 1825 he issued A View of the Philosophical Principles of Phrenology (London), and this philosophy occupied Volume II entirely of the 1832 Phrenology, or the Doctrine of the Mind (Boston). His work on the "natural laws of man" was a separate opus (See Appendix D). In his 1832 Phrenology (see n. 153) Spurzheim elaborated his historical sketch of philosophy presented in The Physiognomical System and commented on other more psychological topics. A few definitions from that work will serve to illustrate his concerns:

> Instinct.--This term "denotes every inclination to act arising from within [the organism; moreover,] instincts . . . are merely effects, and do not express peculiar causes producing determinate actions . . . it is an error to say that animals act solely by instinct";
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> Consciousness.--This "is a general term, and is an effect of the activity of one or several mental faculties. It is identic with mind and exists in all its operations: in perception, attention, memory, judgment, imagination, association, sympathy, antipathy, pleasure, pain, in affections and passions. Mind cannot be thought of without consciousness";
>
> Perception.--"perception is an essential constituent in the nature of the intellectual faculties generally, and one of their particular modes of activity; yet it is no special faculty of the mind; . . . consequently I make a distinction between perceptive powers and kinds of perception . . . the intellectual faculties alone seem to be perceptive . . .";
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> Memory.--"memory is not a fundamental faculty, but the repetition of some previous perception"; and,

> Reminiscence.--"We have reminiscence, if we remember how certain perceptions have been acquired, while memory consists in the perfect reproduction of former perceptions . . ."194

and so on. In a later section, Spurzheim discusses the "fundamental phenomena of the mind" based on all his other physiological inquiries, presenting it as a summary of the philosophy of phrenology. Here each organ's "Aim," "Disorders," and functions as a result of "inactivity" are cited. For example, the aim of the organ "Amativeness" is the propagation of the species; its disorders include fornication, adultery, incest and other illegitimate modes of satisfaction. When it is inactive, it predisposes the individual to passive continency. The aim of "Secretiveness," on the other hand is to conceal. Its disorders result in cunning, duplicity, falsehood, hypocrisy, dissimilation, intriguing, and lying. When it is inactive, it predisposes the individual to be deceived by others.

The most influential of all Spurzheim's philosophical statements, however, appears to have been his work on the "natural laws of man." Issued originally in 1825 (London), the work was reissued in 1828 (London) and 1832 (Boston). By 1839, it was in its 5th American printing (Boston). In 1824, George Combe had been shown the manuscript for this work, possibly by R. Willis, who translated it from a French manuscript which Spurzheim gave him. As a result of Combe's reading, he ultimately published his The Constitution of

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194 Spurzheim, Phrenology, pp. 373-381.

Man Considered in Relation to External Objects (1828 [1st Amer. ed., Boston, 1829]). This latter work (based on Spurzheim's views on the "natural laws"), had fortunes bequeathed in order to insure its continued circulation, was said to be found on 19th century shelves where only the Bible and Pilgrim's Progress could be found, was translated into at least six foreign languages, issued in a special edition for the blind, and, by 1854, had sold almost a third of a million copies (this writer discussed Combe and the scope of his influence in detail elsewhere).[195] Why was it then that Spurzheim felt compelled to discuss the natural laws of man in a separate book involving, as it did, ideals which were to be highly influential? He answers that question in his preface. There he states:

> The following pages are written with a view to ascertain whether or not the human kind be susceptible of better treatment, and whether or not the arbitrary legislation of Man, that has hitherto been, and must always be, but temporary, and of limited application, might not advantagiously give place to a code of IMMUTABLE LAWS which, not adapted to a single family, to a particular nation, to an age, but to all mankind, and to all times, are calculated to endure as long as the species remains.196

He presents his thoughts in the form of question and answer "to better fix the attention of . . .[the] reader," with the intention

> to contribute to the amelioration of Man; that is to say, to combat his ignorance and immroality, and to point out the means of making him better and

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[195] Walsh, "George Combe," n. 7.

[196] G. Spurzheim, A Sketch of the Natural Laws of Man (London, 1825), pp. v-vi.

> happier, by insisting particularly on the necessity of fulfilling the laws of his creator.197

These goals were lofty to say the least, but they found wide acceptance in the 1820's since they went against the pessimistic Calvinism characteristic of the age, i.e., they evoked optimism by suggesting that Man was capable of improving his world condition. In their ultimate expression via the reinterpretation by Combe, it was held that the natural laws--the physical, which govern the whole material system of the universe; the organic, which govern organic beings; and, the moral, which are necessary to maintain social harmony--when infringed, are the cause of such diverse events as disease, war, political upheaval, economic problems, crime, mental illness, and so on.[198] By educating the public, it was believed that these social and personal ills could be eliminated. Furthermore, phrenology was believed to be the mental philosophy par excellence to bring all this about. "What is the grand cause of the moral misery of man?" Spurzheim asks his readers in this work. His answer is

> It consists in the great activity of the inferior or animal faculties. These when combated by the moral nature, suffer pain from the restraint. Moreover, the desires they originate are insatiable; the more they are insatiable; the more they are indulged, the more they crave indulgence.199

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[197] Ibid.

[198] Walsh, "George Combe," p. 275.

[199] Spurzheim, A Sketch, pp. 98-99.

Then, reaffirming the "protestant ethic," he inquires, "Are we required by natural morality to labour for and support the idler?" His answer is simply no:

> Whilst it commands aid to the unfortunate and the infirm, who are unable by their own exertions to procure the means of existence, natural morality enjoins the rejection of the sluggard and drone as unworthy.200

And "How may the natural laws be divided? he continues. They are divided "into three kinds, after the three fold nature of his [man's] functions, viz., vegetative, intellectual and moral [note the difference with Combe's above];" and "What title is given to the consequence of the infringement of a law?" The answer again is to the point. The title given the infringement of a law is "Evil."[201] With these and other similarly asked and answered questions Spurzheim brought his readers step-by-step toward a fuller understanding of their condition in this world--including in the process directives for them to follow to reform their lives.

It has been the purpose of this chapter to depict Spurzheim in a different light than he has heretofore been depicted. While the author has not endeavored to engage in polemics on technical theoretical points, the reader should now be aware that Spurzheim was a personage, a theoretician, who was more complex than they may have envisioned. He did not merely take Gall's ideas and regurgitate them

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[200] Ibid., p. 137.

[201] Ibid., passim.

without thought. He did extend the views which Gall originated; but, he did so, it is believed, for purely altruistic, albeit theoretical, reasons. That his views changed for the worse in the hands of others who came after him is not a reflection on him.

Thus far we have dealt mainly with the men and the events which took place in their lives during the years when phrenology was "taking hold" in Europe and England. During this same period of time, interest in the new doctrines developed in the United States through a number of channels. Before dealing with Spurzheim's American Tour in the fall of 1832, and before depicting the scope of his influence in this country around that time, it is necessary to review the manner in which phrenology was introduced to, and developed in, the United States prior to that eventful autumn. These discussions will then be followed by an exploration of what has been termed, the rise of scientific phrenology in Boston in the years after 1832.

CHAPTER IV

PHRENOLOGY IN AMERICA: 1800-1832

During its development in the 19th century, science was viewed in quite a different manner than it is today. For one thing, as Fairchild has indicated, 19th century "science" was an "expanding" rapidly developing enterprise. "It was thoroughly in harmony with the spirit of the time." It was not surprising, he added, that "the illusion should have come into being that [it] . . . would furnish the key to all man's perplexities and solve all his problems [Italics mine]." Needless to say, this is hardly the prevailing attitude toward science today. The various separate "sciences" of the 19th century, moreover, became "fetishes" of sorts for 19th century man--"he worshipped . . . [them] for the powers that he believed . . . [they] had."[1] Phrenology was one of the sciences which was so worshipped.

From 1800-1832 phrenology's development in the United States was an insidious one. Only after Spurzheim's visit here in 1832 would it develop into a national growing concern. Prior to that date, Americans were exposed to phrenology's tenets mainly as observers of the European scene. European books were imported, Americans read the European journal literature, and few men of science attended

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[1]H. P. Fairchild, The Prodigal Century (New York 1950), pp. 156-157.

either Gall or Spurzheim in Europe and brought home the new ideas. In at least one case, an ardent proselyte appeared who became known as the "American Spurzheim"--viz., Charles Caldwell. Some European books were actually republished in this country prior to 1832, however, and one also finds occasional American journals of the period reviewing phrenological works. But, America's exposure to the new doctrines was basically erratic. In addition, the average man of the early 19th century would not customarily read esoteric journals, if he could read at all; and, when one considers that today many Americans have never read a book to completion, one can well imagine a worse state of affairs during the early 19th century when the value of the "Three R's" was of questionable utility to an agrarian mentality. To counteract this, however, the public lecture as a mode of entertainment could provide exposure to ideas such as phrenology. But it is probably safe to say that prior to 1832, exposure to phrenology's ideas was restricted to the educated, scientifically knowledgeable leisure classes. After 1832, that trend would reverse. Furthermore, prior to 1800, we find in the writings of Benjamin Rush, portents of things to come.

Benjamin Rush: An Early "Phrenologist"

In Chapter II mention was made of the fact that it was Benjamin Rush (1745-1813) who was considered by Noel and Carlson to have used the term "phrenology" for the first time.[2] It was pointed out that although Rush's use of the term was "original," he did not use it in its ultimate more commonly understood meaning--i.e., he did not use it to apply to the "science" of determining mental functioning by cranial configuration. In 1805 Rush lectured on "the state of phrenology, if I may be allowed to coin a word [he wrote,] to designate the science of the mind."[3] In 1806, he listed "those sciences which have created such an immense difference between the knowledge of Hippocrates, and that of the present day" as "natural history, anatomy, physiology, chemistry, [and] phrenology or the history of the faculties and operations of the human mind."[4] In an unpublished manuscript--Lectures Upon the Mind--he mentioned the term again:

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[2]P. S. Noel and E. T. Carlson, "Origins of the Word 'Phrenology,'" Amer. J. Psychiat. 127 (1970):694-697.

[3]B. Rush, On the Utility of a Knowledge of the Faculties and Operations of the Human Mind, to a Physician in Sixteen Introductory Lectures (Philadelphia, 1811), p. 271, quoted in Ibid., p. 695.

[4]B. Rush, On the Opinions and Modes of Practice of Hippocrates, to a Physician in Sixteen Introductory Lectures (Philadelphia, 1811), p. 293, quoted in Ibid.

> The history of the faculties and operations of the human mind is the most certain of all kinds of knowledge. It consists of facts only. It relates to feelings and actions which take place within ourselves, and in which it is not possible for us to be deceived. I know this account of Phrenology is not a popular one, but it is notwithstanding strictly true. From the science to which I have given that simple name, I reject the metaphysical onotology of the Schools which has for its objects the properties of spirit, or being, in general, and shall confine myself exclusively to the history of the human mind.5

Thus, for Rush, "phrenology" seems to be used in these remarks in its etymological sense (from the Greek phren-, for mind, and -logia, for discourse) as the science of, discourse on, or the study of, the human mind (see n. 7, Chapter II). This usage is a legitimate one and is comparable to the early use of the term "psychology," although the latter has come to mean today the science of, or study of, human and animal behavior. In any event, in a much earlier work than the ones cited by Noel and Carlson, Rush presented specific ideas on the nature of mind which are somewhat comparable to what phrenologists per se were stating later. The work was Rush's Enquiry Into the Influences of Physical Causes Upon the Moral Faculty, read 27 February 1786 at a meeting of the American Philosophical Society.[6]

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[5] Ibid.

[6] B. Rush, Enquiry into the Influence of Physical Causes on the Moral Faculty (Philadelphia, 1786). Republished with an "Introduction" by E. T. Carlson (New York, 1972), q.v., E. T. Carlson and M. M. Simpson, "Benjamin Rush's Use of the Moral Faculty," Bull. Hist. Med. 39 (1965):22-33.

This work is considered to be Rush's "most important philosophical paper" as well as a "landmark in the development of psychiatry as a science."[7]

Rush's phrenology (or psychology) followed the pattern of the many faculty psychologies of the period. The faculties were comparable to the "external senses," for Rush, and were considered to be innate, i.e., in existence prior to experience, and were referred to as "internal senses." "At the same time they [the "internal senses," i.e., the faculties] did not function without the stimulus of impressions received through the external senses."[8] There were nine faculties in Rush's system: understanding, memory, imagination, passions, will, principle of faith, moral faculty, conscience, and sense of deity. In a manner similar to later phrenological views of mental functioning, Rush contended that the faculties of the mind are not completely independent and separate units. Each of them had a reciprocal relationship much in the same way that, in Spurzheim's system, the intellectual faculties, the "perceptives" and the "reflectives," could work together and/or independently (see Appendix B). Carlson and Simpson have discussed Rush's use of the moral faculty in particular at length (n. 6). I will discuss it briefly here only as it is related to Rush's phrenology in the 1786 Enquiry (n. 6 and its referent).

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[7]Carlson and Simpson, p. 24.

[8]Ibid.

"By the moral faculty," Rush states in that source, he meant

> . . . a power in the human mind of distinguishing and chusing [sic] good and evil; or, in other words, virtue and vice. It is a native principle, and though it is capable of improvement by experience and reflexion, it is not derived from either of them.9

In this early statement on the moral faculty Rush has suggested tenets later adhered to by phrenologists, viz., that the mental faculties are innate, they are not derived from experience, and, that "exercise [experience]," as Spurzheim was later to suggest, "strengthens" (i.e., improves) them.[10] Later in Rush's Enquiry he suggested that the effect of "bodily pain" upon the moral faculty ("moral powers of the mind") would "cure vice," and would rouse "and direct the moral faculty," i.e., a little pain and suffering, he contended, tended to be "medicinal" and improving.[11] In much the same manner Spurzheim also suggested

> In order to cultivate benevolence, one should not frequent only the society of rich and opulent persons . . . he must experience misery himself, and contemplate the painful situations of others.12

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[9] I use the 1972 facsimile of the 1786 original in all direct quotes from the Enquiry by B. Rush, p. 1.

[10] G. Spurzheim, A View of the Elementary Principles of Education Founded on the Study of the Nature of Man, 5th Amer. ed. (Boston, 1836).

[11] Rush, Enquiry, p. 22.

[12] Spurzheim, p. 94.

For Rush, the moral faculty, or, the moral sense must be distinguished from conscience.

> This faculty is often confounded with conscience [, he wrote,] which is a distinct and independent power of the mind. The moral faculty is what the schoolmen call the 'regula regulans,'--the conscience is their 'regula regulata.' Or, to speak in more modern terms, the moral faculty performs the office of law giver, while the business of conscience is to perform the duty of a judge.13

Where is the conscience and the moral faculty's locus? For Rush, the "will" is the seat of the moral faculty while the "understanding" is the seat of the conscience.

The vagaries of Rush's phrenological theory, as was previously mentioned, are discussed by Carlson and Simpson (n. 6). Rush's main purpose in writing the 1786 Enquiry was, as its title indicates, to explore the influence of physical causes on the moral faculty--not to elaborate his unique views of mental functioning per se. The very fact that he did acknowledge that "physical causes," i.e., the physical condition of the body, could influence the functioning of the mind placed him, in the eyes of at least one later phrenological figure (George Combe) in the position of antedating Gall's views. A brief account of these "physical causes" is therefore necessary since, if Rush were read prior to 1832, and, if his views were considered tenable, then he helped pave the way for the acceptance of Gall and Spurzheim's own unique form of phrenology when it finally appeared.

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[13]Rush, Enquiry, p. 2.

In Rush's more general medical theory he stressed "that debility or weakness of some sort always precedes the development of a disease."[14] Mental illness in his system was a result of morbid excitement of the blood vessels of the cranium.

> I infer [, he indicated on one occasion,] that madness is seated in the blood vessels . . . from its symptoms . . . [e.g.,] a sense of fulness, and sometimes pain in the head; wakefulness, and a redness of the eyes, such as precede fever.15

The result of all this was a disruption of the functioning of the mental faculties--"for, in Rush's view these faculties are to be thought of as inseparable from the physical processes within the brain."[16] As the reader can gather from previous remarks in earlier chapters, it was phrenology, or Gall at first and Spurzheim and phrenology thereafter, that "stimulated scientists to take up research on the brain and established, once and for all, that the brain was the organ of the mind."[17] Rush's earlier ideas are of interest, therefore, since they came prior to Gall's and suggested that a study of physical causes of mental functioning was required for a complete understanding of man's psychological nature. Some of the antecedent events or ideas related to

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[14]Carlson and Simpson, p. 28.

[15]B. Rush, Medical Inquiries and Observations upon the Diseases of the Mind (Philadelphia, 1812), p. 19 (Reproduced in facsimile, New York, 1962).

[16]Carlson and Simpson, p. 28.

[17]R. I. Watson, The Great Psychologists, 3rd. ed. (Philadelphia, 1971), p. 250.

this were discussed in Chapter II. Rush, however, holds the unique position of having attained, after his death, recognition as a legitimate precursor of Gall by phrenological votaries--Swedenborg and the others cited in Chapter II held no such position.

Rush delineated many physical conditions which could effect the moral faculty, e.g., 1) the effects of certain drinks, taken in moderation (e.g., "fermented liquors of good quality") can bring out the "virtues of candor, benevolence and generosity," in excess they may have the opposite effect; 2) "extreme hunger produces the most unfriendly effects" upon the moral faculty; 3) "idleness is the parent of every vice"; 4) "excessive sleep" is deleterious to the functioning of the moral faculty; 5) "solitude" as a prescription for irascibility can help the expression of the moral faculty; 6) "silence" can also "promote virtue"; 7) music improves the moral faculty; 8) a good preacher can influence the moral faculty; 9) odors "act in a most sensible manner upon the moral faculty"--"hence the propriety of connecting the pipe or segar [sic] and the bottle together, in public company"; 9) "dephlogisticated air [pure oxygen], when taken into the lungs, produces cheerfulness--gentleness--and serenity of mind"; and, 10) medicines too can act favorably upon the moral faculty.

The phrenologist alluded to earlier as having particularly felt that Rush's work was important was George Combe. He felt that the Enquiry of 1786 was important enough

in fact to republish and he did so in 1839 (Philadelphia) providing an "Introduction" for it. In that source Combe tells us

> The nearest approach to Gall's discovery which has come under my notice, is one that the opponents of phrenology have not referred to. It is contained in an inquiry into the influence of physical causes upon the moral faculty, delivered by Dr. Benjamin Rush . . . In this inquiry coming discoveries may be said to have cast their shadows before, and Dr. Rush, by observing and faithfully recording the phenomena of nature, has brought to light several important truths, which have since been confirmed and elucidated by phrenology, in a manner that evinces, on his part, extraordinary depth and perspicacity of intellect, combined with the highest moral qualities.18

Although Boardman (n. 18) felt that Swedenborg was more important than was Rush, it is significant that George Combe --Spurzheim's disciple and the leading phrenological figure in 1839--did not agree. In any event, when early accounts of phrenology began to filter into America, it is not too difficult to imagine that the people who knew of Rush's earlier speculations were probably less shocked by Gall and Spurzheim's views then were those who did not. Those who were aware of Rush's theories, furthermore, would probably have seen Gall's doctrines as an extension of them. This notion, however, is purely speculative and requires a deeper analysis than could conveniently be included here. But one final expression of the phrenologists' approbation for Rush should not go unmentioned. At the close of a series of

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[18] G. Combe, quoted in A. Boardman, "Introductory essay," in G. Combe, Lectures on Phrenology, 3rd ed. (New York, 1846), p. 50.

lectures in New York City delivered by George Combe in 1839, it was resolved to present him with a concrete expression of approval for what he had done. A committee was formed and took measures to have a Grecian model vase executed in silver to present to him. When completed, the vase was exhibited at the "Fair of the American Institute" and was awarded a gold medal "on account of its superior workmanship." In addition to an inscription, the vase contained likenesses of the important figures in phrenology's history, Gall, Spurzheim, George Combe, Charles Caldwell (see infra), and one other likeness which one might not have expected, that of the "phrenologist" Benjamin Rush.[19]

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[19]Ibid., p. x.

The Medical Institution of Maine at Bowdoin College, John D. Wells, and Phrenology

In 1839 Andrew Boardman prepared an "Introductory Essay" for George Combe's Lectures on Phrenology (n. 18). In this essay he comments on the state of phrenology at that period, discussed antecedent events related to it, and presented "The history of phrenology in the United States," which, due to the fact that there wasn't much of it prior to 1832, Boardman contended, such a history could be "readily told." Among his statements in regard to U. S. phrenology prior to 1832 is the following:

> In 1823, Dr. John D. Wells, of Bowdoin College, Brunswick, State of Maine, on his return from Europe, where he had heard phrenology taught, by Gall himself, commenced an annual exposition and recommendation of its doctrines, to his class, which he continued, I believe, as long as he remained at the college.20

In 1955, Davies, apparently drawing on this statement (but not citing Boardman), made a similar remark.[21] This writer cited Boardman regarding Wells and his involvement in a previously published work.[22] Having had the opportunity to pursue these leads further, the writer wishes to augment the remarks previously stated in regard to Wells and

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[20] Ibid., p. 79.

[21] J. D. Davies, Phrenology Fad and Science: A 19th-century American Crusade (Hamden, Conn., 1971 [1955]), p. 13.

[22] A.A. Walsh, "The American Tour of Dr. Spurzheim," J. Hist. Med. All. Sci. 27 (1972):188.

phrenology at Bowdoin.

Like many educational figures in the history of this country, regardless of the discipline with which they were associated, John D. Wells is one of those whose import seems to be provincial. Both Wells and his associate at "The Medical Institution of Maine at Bowdoin," Parker Cleaveland, are not well known outside that state. Neither are mentioned in Rothstein's American Physicians in the Nineteenth Century (Baltimore, 1972) nor in Garrison's An Introduction to the History of Medicine, 4th ed. (Philadelphia, 1968). Rothstein does not even mention the Medical School at Bowdoin although it was in existence for one hundred years (it is no longer functioning, having formally closed in June, 1921).

At Bowdoin College today in the rare book vaults of that institution there exists an untapped source of material on the Medical School's operations throughout its long history. Among the many documents which were preserved there, are the unpublished handwritten Statutes of the Medical School of Maine or Records of the Medical Faculty. From 1820 to 1858 Parker Cleaveland, M.D., the elected secretary of the faculty, kept beautifully detailed records of the activities of the school during that era.[23] In addition to this resource, and, particularly in regard to our current

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[23]See also on this, Addresses at the Centennial Exercises of the Bowdoin Medical School, June 23, 1920 (Brunswick, Maine, 1920).

interests, the library has a vast storehouse of correspondence on file. Included in this are ninety-two letters from Wells to Cleaveland during the 1820's, ending in 1830 at Wells' death. It is from these sources that the writer was able to obtain some clarification of phrenology's import in the Medical School of Maine during the 1820's.

The Medical School of Maine at Bowdoin began formal operations in 1820. On October 25th of that year, "on an examination of the ballots," Parker Cleaveland was voted Secretary. The school planned to operate one three-month session per year beginning in February. To be awarded the M. D. degree, a potential candidate was required to attend two three-month sessions and prepare and defend a dissertation on a medical topic. In addition to refraining from intemperate habits while students, all minors were required to present a note from home before being considered as candidates. When the Medical School began one "Dr. Reynolds" was the professor of anatomy. He was followed by Nathan Smith who resigned in 1821, was reinstated in 1822, and resigned for good in 1825. In the beginning, John Wells was listed in the announcements for the school as an "Assistant Demonstrator in Anatomy." He eventually replaced Nathan Smith as head of anatomy; and, in addition, became the librarian for the school's medical library.

In 1821 and 1822 Wells was sent to Europe to procure medical books for the library; and, after spending in excess of $1500.00 for such items, he was back in Brunswick for

the Spring session of 1823. It was during this Spring session that Boardman contended that Wells began lecturing on phrenology. There is no formal record at Bowdoin of his having done so. Although the rare-book librarian at Bowdoin was of the opinion that lecture notes may be "extant somewhere on their campus" which could verify this, the writer was unable to confirm Boardman's statement (nor were the lecture notes located).

There is indication, however, that the students at the college were interested in matters pathological in regard to mental functioning. Also, one can find an indication of Wells' interest in phrenology by the nature of the books he acquired for the library. An examination of the ninety-two letters to Cleaveland from 1823-1830 indicates that it was Wells who was mainly responsible for the acquisition of not only books for the medical library, but also scientific apparatus, and an occasional furtively acquired corpse which he would ship by packet from Boston--in a barrel--instructing Cleaveland to pack it immediately in a mixture of rum and water. There is no indication in any of Wells' correspondence to Cleaveland, however, that the two discussed phrenology (or Gall for that matter). Occasionally Wells will tell Cleaveland that he has bought some new phrenology works, indicating furthermore that he would like to hold on to them for a few days for examination. But, since he did this with other non-phrenological titles also, one can only conclude that he held broad interests which

included phrenological ones.

Among the forty or so dissertations written during the early years of the school (c. 1822-1831) there were at least four on insanity, and five on delirium tremens. Other ones which would be interesting to peruse if they could be located include:

> Sumner Cummings' "Dissertation on Diseases of the Brain from External Violence" (May 16, 1823);
>
> George S. Currier's "Dissertation de Hysteria" (May 16, 1831);
>
> Cyrus Hamlin's "Dissertation de Masturbatione" (May 13, 1828);
>
> Nathaniel Kingsbury's "Dissertation de Natura et Causis Insaniae" (May 20, 1829);
>
> Thomas Wight's "Dissertation de Phrenitide" [sic] (May 19, 1830);
>
> Hermon Bourne's "Dissertation de Mente Nervis Excitatis Affecta" (May 19, 1830); and,
>
> Daniel L [or S]. Hobbs' "Dissertation on the Influence of Physical Causes on the Mental Powers" (May 16, 1826).

In an institution which did not advertise course work related to psychiatry, abnormal psychology and the like, it is particularly curious that so many dissertations appeared on those very topics. The above mentioned dissertations are only a sampling of the many similar ones which were written. The reader should note particularly the dissertation by Hobbs. While Rush had modestly explored the relationship of physical causes on only one mental faculty, Hobbs, in a similarly entitled opus was exploring the influence of physical

causes on all the "mental powers"--probably on those then admitted by phrenology. We do know that Hobbs had access to phrenological works. In the Catalogue of the Library of the Medical School of Maine at Bowdoin College, February, 1823 (Brunswick) one discovers that Abernathy's Reflections on Gall and Spurzheim's System of Physiognomy and Phrenology (London, 1821) is listed among the entries. In an "Appendix" to that catalogue published December 1823, Combe's Essays on Phrenology (Edinburgh, 1819), Spurzheim's Insanity (London, 1817), and Spurzheim's Observations sur la Phraenologie (Paris, 1818) are also listed. In the catalogue of February 1830 (Brunswick), in addition to those works previously cited, the library also listed copies of works by Caldwell and Broussais, additional works by Combe, MacKensie's Illustrations of Phrenology (Edinburgh, 1820), Spurzheim's 1826 Anatomy and his 1825 A View of the Philosophical Principles of Phrenology, the Transactions of the [Edinburgh] Phrenological Society (1822), and subscribed to The Phrenological Journal and Miscellany (Edinburgh). In addition, a inscription inside the front cover of Bowdoin Library's copy of H. T. Judson's Alphabet of Phrenology (New York, 1833) notes that "Edwin Leigh" presented this work to the Phrenological Society of Bowdoin College in the early 1830's --indicating that a society existed there at one time perhaps even in the 1820's.

One must conclude, I believe, that exposing medical students to the literature of phrenology was--at least in

Maine--considered to be a legitimate part of the corpus medica of the period. Furthermore, although the students at Maine were not given--to the writer's knowledge--specified instruction in matters neuropsychological, they still exhibited an interest in such matters. Whether or not Wells actually lectured on phrenology must remain open. But, since he was in charge of medical book purchases, and, since the library owned a reasonably good collection of representative literature, he must have recognized phrenology's views as having value for medical education. It is also quite likely that other medical schools of the period held similar views.

When Wells died on 25 July 1830 Parker Cleaveland entered a eulogy in the faculty minutes. After flowery commentary on Wells' value as a person, he concludes that Wells' "professional instructions [were] uncontaminated by erroneous philosophy." If indeed Wells was lecturing on phrenology during the 1820's as Boardman contends, Cleaveland's remark might be construed to be a vote of approval of the phrenological point of view. For further information on Wells, Cleaveland, and the medical school at Bowdoin see N. Cleveland and A. S. Packard, History of Bowdoin College, With Biographical Sketches of its Graduates (Boston, 1882), especially pp. 12-13 and 140-141.

Phrenology in Philadelphia

Phrenology came to Philadelphia quite early; and apparently an active interest in topics phrenological occurred here earlier than in any other part of this country. Apart from the fact that Benjamin Rush sowed the seeds of phrenological thinking there in 1786, there were others who discussed Gall and Spurzheim's new views comparatively early. George Combe reported in his Notes on the United States . . . During a Phrenological Visit that in 1839, when he was in Philadelphia, he met Nicholas Biddle--then President of the United States' Bank--who informed Combe that he had "attended a course of lectures given by Gall at Carlsruhe in Germany, in 1806 or 1807" (Gall and Spurzheim were in Carlsruhe from 28 November to 26 December 1806, see Chapter III).[24] Combe stated further that Biddle

> . . . subsequently, presented to me a skull which Dr. Spurzheim had marked for him, showing the situations of the organs as then discovered, and which had remained in his possession ever since . . . This skull, which records the state of the science in . . . [1806], presents blank spaces where the organs of Hope, Conscientiousness, Individuality, Concentrativeness, Time, Size, and Weight, are now marked, these having at that time been unascertained.25

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[24] G. Combe, Notes on the United States of North America During a Phrenological Visit in 1838-9-40, 2 vols. (Philadelphia, 1841) 1:188. On Biddle, see The National Cyclopaedia of American Biography, s.v., "Biddle, Nicholas."

[25] Ibid.

This statement by Combe about Biddle's experience is interesting since it is relevant to remarks in the previous chapter regarding Spurzheim's activities during the early years of his association with Gall. At that early date, Spurzheim was taking an active role with Gall. He was probably not, as Hollander implied, just an assistant and secretary (see Chapter III). He was privy to the system enough to mark skulls for auditors.

Subsequent to this early event by a prominent Philadelphian, our story must jump to the early 1820's. No records which have come to this writer's attention indicate that anything special in regard to phrenology developed in Philadelphia directly after Biddle's return. Davies also found this period to be generally barren; and, furthermore, Riegel's reserach led him to conclude that "there were no avowed phrenologists in the new world before 1820."[26]

Early in 1820 Phrenology blossomed in the "city of brotherly love." The locus of this activity was the University of Pennsylvania, particularly the medical school, but specifically, it appears, the faculty of that great institution. In March 1822, the "Central Phrenological Society" was formed there--but two years, almost to the month, from the time that the first such society had been formed in Edinburgh (22 February 1820). The society was made up

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[26]Davies, p. 13; R. E. Riegel, "Early Phrenology in the United States," Med. Life 37 (1930):364, and, "The Introduction of Phrenology to the United States," Amer. Hist. Rev. 29 (1934):73-78.

of prominent physicians of the period. In addition, it received support from The Philadelphia Journal of the Medical and Physical Sciences which was at that time under the editorship of Nathaniel Chapman, M.D.--a fellow professor at the University. The Select Medical Library also supported this venture--edited by John Bell, M.D., also a member of the faculty. Bell was not the Scottish John Bell, brother of the neurologist Sir Charles, nor was he the John Bell who wrote "Dissertation on Percussion and Mediate Auscultation in Diseases of the Chest" for his M.D. degree at Bowdoin, 20 May 1823. He was the John Bell who was eventually to be elected "Vice-president" at the organizational meeting in the 1840's of what eventually became the American Medical Association.[27]

The Philadelphia Journal of the Medical and Physical Sciences, which was founded in 1820 by Nathaniel Chapman--president of the American Philosophical Association--, was brought into being partly in response to the "famous" attack by Sydney Smith in the Edinburgh Review.[28] The title pages of this early journal bear a quote from that "famous" article taken as the journal's motto:

> In the four corners of the globe, who reads an American book? or goes to an American play? or looks at an American picture or statue? What does the world yet owe to American Physicians or Surgeons?

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[27]M. Fishbein, A History of the American Medical Association 1841-1947 (Philadelphia, 1969), p. 24.

[28]F. L. Mott, A History of American Magazines 1741-1850, 5 vols. (Boston, 1939), 1:49.

The gauntlet thus thrust down by Smith, was soon picked up by the Americans; and, in their early enthusiasm for cultural, political, intellectual, and medical recognition, American men of science--in response to the Zeitgeist--were not only receptive to new ideas from within, but were equally capable of expanding in a unique way ideas which came from without their as yet to be completely defined territorial boundaries. An early interest in the potential of and importance of phrenology reflects this receptivity.

In the fourth volume of Chapman's journal for 1822 the announcement of the new Philadelphia Phrenological Society was made under "Medical and Philosophical Intelligence." It read

> Phrenological Society of Philadelphia.
>
> Though of recent formation, this Society embraces a number of the respectable and intelligent gentlemen of the city, and if we may judge from the wide field of investigation which it opens, will doubtless be of considerable utility, by leading to a more precise and observing study of the physical and moral nature of man.
>
> Assuming as the basis of its inquiries, the great physiological truth, that all the phenomena of animated nature are displayed through organization in general, and that all the intellectual phenomena are evidenced by means of the brain in particular, the Society, in admitting the plurality of mental faculties, and corresponding cerebral organs, proposed to pursue 'the study of the operations of mind as depending on proportional development of the brain.' With this view, it will of course call in Comparative Anatomy and Natural History to its aid, by observing the coincidence between the various instincts of animals and their cerebral organization and development--and when furnished with illustrations from this quarter, will extend the examination to all the varieties of our own species, and see how far national and individual character may have

> received their first impress by peculiarity of cerebral structure.
>
> It would, perhaps, be premature to speak of the proposed practical application of the Society's labour, to a nicer discrimination between feelings, and propensities, and intellect, so as to direct, with a prospect of success, that great moral engine, Education: and also, by a classification of primitive faculties, enable us to note more accurately their modifications, constituting individual character, and their diseased action, producing insanity.29

The officers of the society were: President--Philip Syng Physick, M.D.; Vice-Presidents--William E. Horner, M.D. and Clement C. Biddle, Esq.; Curators--Wm. P. S. Barton, M.D. and Aaron B. Tucker, M.D.; Corresponding Secretary--John Bell, M.D.; Recording Secretary--Benjamin Coates, M.D.; and, Treasurer--Joseph Cabot, Esq.[30]

During the first year of its existence the society was quite active,

> . . . pursuing its course with a zeal, untired by the many difficulties which it had naturally to encounter, arising principally from the small number of illustrations, by casts and skulls, in its possession, and the backwardness of persons in giving their attention to doctrines, the nature and tendencies of which had been ignorantly misconstrued, or designedly misrepresented, and the utility and application of which were not at first very evident.31

"The new year, however," Chapman wrote in volume five of his journal, "opens under bright auspices."[32] On 9 January 1823,

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[29] Phil. J. Med. Phys. Sci. 4 (1822):204-205.

[30] Ibid.

[31] "Phrenological society," Phil. J. Med. Phys. Sci. 5 (1822):442.

[32] Ibid.

the society elected new officers. All the original officers retained their ranks except that new curators were elected, viz., George W. Smith and J. K. Mitchell, M.D. At this time, the society began to receive casts from Edinburgh, the whole of which, it was said, were "well calculated for the benefit of the purposes of national and individual comparison, to benefit of the moralist, the legislator and philanthropist."[33] These included casts of the heads of e.g., Robert Bruce, Oliver Cromwell, Henry IV of France, Napoleon, George III, Shakespeare, Voltaire, and casts of skulls of, e.g., Indians, New Hollanders, the "Esquimaux," and Egyptian mummies. In addition to compiling this collection, the society appointed "lecturers for the year."

The tenor of the society's attitude at this time toward phrenology was embodied in a statement which the Edinburgh Review made regarding Abernathy's opus on Gall and Spurzheim (discussed also in the previous Chapter). Chapman quoted directly from those remarks:

> We may observe that an ignorant condemnation of phrenology will very shortly be neither a safe nor credible passport to reputation for superior good sense and discrimination. It has been demonstrated in the clearest manner that no facts or arguments are known which prove, a priori, the science to be unfounded, and that, therefore, its truth must resolve itself into a question purely of fact, depending for its solution upon observation. Such being the case, it requires very little sagacity to discover, that the testimony of even one individual of ordinary honesty and penetration, to the truth of the doctrines, outweighs in the scale of philosophical estimation, the sneer of a thousand opponents, who are destitute of

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[33] Ibid., p. 443.

> practical knowledge of the subject. In place of one such witness appearing in favour of phrenology, it must be obvious to everyone that there are hundreds, if not thousands, daily testifying to its truth.34

It is interesting that the same Edinburgh Review that allowed vituperation and malignity to be thrust upon Gall and Spurzheim earlier in the century allowed, at this juncture (c. 1821-1822), such a positive and optimistic statement to appear on its pages. In any event, some of these remarks, oddly enough, are relevant today, and, one might say, "an ignorant condemnation of phrenology" still is "neither a safe nor credible passport to reputation for superior good sense and discrimination." As Dallenbach has recently stated,

> Theories are not killed by criticism; they do not die, they just fade away--and poor indeed is the theory of yesterday that does not find some adherents today . . . Theories pass from the scientific stage not because they were disproved but because they have been superseded--pushed off and replaced by others that are new . . . [A theory is left behind] not because any satisfactory solution has been reached, but because interest is exhausted.35

Such was the eventual lot of phrenological theory. But I digress. In the 1820's it was new, exciting and seemingly promising.

Among the enthusiastic supporters of "The Central

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[34]Ibid., p. 442 and see also the Eclectic Rev. 35 (1821):551-560.

[35]K. M. Dallenbach, "Phrenology Versus Psychoanalysis," Amer. J. Psychol. 68 (1955):511.

Phrenological Society" was John Bell who was previously mentioned. In 1822, Bell was apparently convinced of the merit of a work by George Combe, and believing that the Americans needed some primary material to work with, he reissued it at Philadelphia. The work was entitled Essays on Phrenology, or an Inquiry into the Principles and Utility of the System of Drs. Gall and Spurzheim, and into the Objections Made Against It which Combe had first published in 1819 (Edinburgh).[36] To this Bell added "notes and additions, comprehending memoirs on the anatomy of the brain, and on insanity," and dedicated it

TO

PHILIP SYNG PHYSICK, M. D.

PROFESSOR OF ANATOMY

IN THE UNIVERSITY OF PENNSYLVANIA

MEMBER OF THE AMERICAN PHILOSOPHICAL SOCIETY, AND

PRESIDENT OF PHRENOLOGICAL AND MEDICAL

SOCIETIES, OF PHILADELPHIA, &C.

THE FOLLOWING WORK,

BEING AN ATTEMPT TO ENLARGE THE DOMAIN OF

PHYSIOLOGY,

and improve the philosophy of the human mind,

is with peculiar propriety

inscribed,

and its acceptance solicited

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[36] A. A. Walsh, "George Combe: A Portrait of a Heretofore Generally Unknown Behaviorist," J. Hist. Behav. Sci. 7 (1971):269-278.

as a sincere, though inadequate,
testimony of respect for his acknowledged talents
AND EXTENDED USEFULNESS
by his obedient servant,
John Bell

Philip Syng Physick, (1768-1837), the "father of American surgery," was one of the most--if not the most--prominent surgeon-anatomists in this country during the first quarter of the 19th century. In 1825 he was made a member of the Academy of Medicine of France (no small distinction), and in 1836 an honorary fellow of the Royal Medical and Chirurgical Society of London.[37] Although Garrison contended that he wrote "nothing of consequence," he did create milestones in surgical history, by, e.g., his development of the tonsillotome in 1828,[38] an instrument for performing tonsillectomies. More important in regard to our narrative, however, was the fact that he was the first president of the first American phrenological society (see supra). In any event the reissuance of Combe's tract represents a milestone in phrenological history since it was the "first publication in favour of the science . . . in this country."[39]

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[37] The National Cyclopaedia of American Biography, s.v. "Physick, Philip Syng."

[38] F. H. Garrison, An Introduction to the History of Medicine, 4th ed. (Philadelphia, 1968), p. 499.

[39] Boardman, p. 78.

On March 4th and 18th, 1822 Bell had delivered a paper before the phrenological society entitled "On Phrenology, or the Study of the Intellectual and Moral Nature of Man" which was ultimately published in Chapman's journal.[40] This lengthy paper--it occupied two sessions of the society's meetings--was also included by Bell in Combe's volume as a "Preliminary Essay" (pp. ix-liv). Bell's total contribution to the American edition of Combe's work, in fact, was nearly one hundred and fifty pages--i.e., almost one-third the total length of the book.

Bell's reissuance of Combe's publication was immediately reviewed in Chapman's journal.[41] The review which Chapman published was from an anonymous writer, "a friend, for whose judgment and literary skill we [Chapman] have much respect, and to whom this Journal owes many obligations." Chapman felt obliged to add a signed prefatory statement to this review, however, stating that

> We do not profess to be entire converts to the doctrines which he [the reviewer] discusses--though we are willing to believe that good has, and may further arise from such investigations.[42]

A major criticism of Combe's work--criticism noted by Bell and pointed out by Chapman--was that Combe omitted an account "for some unknown reason" of the anatomical discoveries of

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[40] Phil. J. Med. Phys. Sci. 4 (1822):72-113.

[41] Phil. J. Med. Phys. Sci. 5 (1822):398-424.

[42] Ibid., p. 398.

Gall and Spurzheim" which would "not be readily excused by physicians bred in an American school." Bell, fortunately, included what Combe had omitted.[43] Chapman concluded his prefatory comments on the review with the remark that "many of the statements it [Bell's edition of Combe on Gall and Spurzheim] contains have been verified by repeated dissections, made in the University of Pennsylvania."[44] Whether the book was a publishing success is not known. It is, in any event, a beautifully illustrated succinct account of Gall and Spurzheim's views.

In 1801 and 1802 John Collins Warren (1778-1856) of Boston had learned of Gall's theory of "craniognomy" during a stay in Paris.[45] He is mentioned here since in 1822 he published a work which discussed Gall and Spurzheim's theories--viz., A Comparative View of the Sensorial and Nervous Systems in Men and Animals (Boston)--, the contents of which were reinterpreted by the "Corresponding Secretary" of the phrenological society at Philadelphia, Benjamin Coates, M.D., following a review of that work which suggested that, as a result of Warren's findings, one more of the phrenologist's "bag of tricks" was shown to be based on faulty evidence. The work which Warren published was a rather informal treatise. In the beginning he states that

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[43] Ibid., pp. 398-399.

[44] Ibid., p. 399.

[45] E. Warren, The Life of John Collins Warren, 2 vols. (Boston, 1860) 2:10.

he was prompted by others to put it forth and that he would have preferred to devote more time to it and publish it when more data was gathered. In any case, it is an interesting little volume. In Chapter II of this dissertation it was mentioned that one of the modes of verification of the phrenological tenets was comparative anatomy. Warren takes issue with this assumption and contended that

> Although many of these [phrenological] opinions are founded on analogies, none are capable of a distinct and satisfactory support from comparative anatomy, I believe, and to some it is decidedly hostile . . . The authors of the craniological or physiognomical system [Gall and Spurzheim] seemed disposed to refer frequently to comparative anatomy for the support of their doctrines; but so far as I have observed, there do not appear to be very good grounds for such a reference.[46]

Warren, in a methodical manner, proceeded to discuss various findings regarding some of the phrenological organs and his personal comparative anatomical observations relating to them. He concludes

> Gentlmen,--The views we have taken, of various points of comparative structure, must, I think, satisfy you that there is not such a peculiarity in the great sensorial organ in man, as to elevate him as much in physical as in moral superiority. Man, gifted with the use of language, improveable by education, transmitting improvements to his posterity, and elevating his thoughts to an invisible world--while he is allied to animals in his material organization, is connected by mind with the spiritual.
>
> We must then . . . throw aside the discouraging and degrading notion that we form a

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[46] J. C. Warren, A Comparative View of the Sensorial and Nervous Systems in Men and Animals (Boston, 1822), p. 86.

> part of the same chain which connects different classes of the brute creation . . . a thought that binds us to the earth [i.e., binds us to materialism] and weighs down our most animating hopes [Italics mine].[47]

Apart from the fact that Warren took a philosophical step backward by reintroducing the idea of the immateriality of mind, his treatise, a scientific inquiry presented in a spirit of moderation--and not designed to pile calumny on top of animadversion regarding Gall and Spurzheim's views--, brought out of hiding the American opposition to phrenology. Curiously the voice of dissention appeared in the same journal in Philadelphia which was simultaneously publishing articles in support of phrenology, viz., Chapman's medical journal. It was this dissident voice which reviewed Warren's work that Coates rebutted. The reviewer of Warren's "so slight an inquiry" had asserted, according to Coates, that "those who have made triumphant assertions, that they were supported in the doctrine of craniology by comparative anatomy, are now [, due to Warren's findings,] entirely deprived of its aid."[48]

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[47] Ibid., pp. 108-109.

[48] B. H. Coates, "Comments on some of the Illustrations Derived by Phrenology From Comparative Anatomy--with Reference to a Late Review of Dr. Warren's Work on the Nervous System.--Delivered, as a Lecture, Before the Phrenological Society of Philadelphia. By B. H. Coates, M.D.," Phil. J. Med. Phys. Sci. 7 (1823):75. The review of Warren's work appeared in this same journal 7 (1823).

The details of the arguments need not concern us here; for, it is an understatement to note that phrenology's history was "racked" with polemics. Each was as interesting as the other and certainly warrant investigation. But we must pass over these details for the nonce since their complexity would preclude the maintenance of readable continuity to the subject at hand. The importance of this early event is that it indicates that as early as 1823 disagreement existed among men of science in this country regarding phrenology's merits. By comparison, however, the American writers were less vituperative in their examinations of phrenology than were their European counterparts. They appear to have been guided more by reason and sober reflective examination of the novel phrenological views, and appear in their writings, therefore, to be less on the defensive. Coates' rejoinder reinterpreted Warren, pointed out where Warren misread Spurzheim, and showed where some of Warren's conclusions were erroneously reached. Coates felt that Warren's work possessed

> . . . excellencies of various kinds, and [that it was] calculated not only to do honour to the author, but to add dignity to the profession, of which he is a member.[49]

Despite Coates' defense he felt obliged to <u>apologize</u> for "reviewing" a scientific work. He chose to do so, he tells us, because

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[49]Ibid., p. 76.

> It arises from the peculiar situation of us and our science [phrenology] at the present juncture [1822-1823]. Our pursuits are looked upon by many with so unfavorable an eye as almost to amount to a persecution . . . we should certainly endeavor to keep our minds open . . . It is therefore necessary, for preserving the due balance of the minds of inquirers, occasionally to reply to attacks involving the general question of the propriety of the study.[50]

The "unfavorable eye" which Coates referred to was probably the eye of fellow physicians; for, during these early years interest in phrenology in America was almost exclusively restricted to that profession. In later years the polemics would become more heated, and the unfavorable eye almost amounting to persecution cast upon the votaries of the science would become more public--i.e., less profession-specific. Much of this would develop after 1832. In regard to Warren's involvement, we will have occasion to return to him and discuss his interests further; for, it was Warren who performed the autopsy on Spurzheim after his death in 1832, and Warren who eventually preserved for posterity Spurzheim's phrenological collection. Several other examples of the involvement of the Philadelphians during these early years, however, are not without interest.

The Philadelphia group continued their involvement in matters anatomical and matters phrenological. As one can gather from a perusal of the medical literature of that era, there were few slackers in Philadelphia--the medical school at which, at the University of Pennsylvania, had been in

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[50]Ibid., pp. 75-76.

operation since 1765. Three other physicians, not previously mentioned, William Edmonds Horner (1793-1853), John Davidson Godman (1794-1830), and Samuel George Morton (1799-1851), were also appreciative of Gall and Spurzheim's phrenological views. A brief account of their involvement follows, beginning with W. E. Horner.

W. E. Horner was born at Warrenton, Fauquier County, Virginia. He studied medicine at both Edinburgh and the University of Pennsylvania, served as an army surgeon in the war of 1812, and settled eventually in Philadelphia in 1815. He commenced lecturing on practical anatomy, and was eventually appointed prosector to Caspar Wistar, Professor of Anatomy, then prosector to John Syng Dorsey, Wistar's successor, and finally, prosector to Philip Syng Physick, Dorsey's uncle and successor in the anatomical chair. In November 1819, Horner was appointed adjunct professor of Anatomy. He eventually succeeded Physick as Professor of Anatomy at the University in 1831. He is best remembered as having published the first work on pathological anatomy in this country--A Treatise on Pathological Anatomy ([Philadelphia?], 1829).

Horner's involvement in phrenology is not extensive. My findings indicate, however, that he had an appreciation for the views of Gall and Spurzheim, and was "persuaded that theirs [Gall and Spurzheim's neurological anatomy] is a very improved and simplified mode of studying the anatomy

of the brain."[51] He felt that their other more phrenological tenets were "peculiar" in the sense of being unusual, not in a derogatory sense. In any event, he deemed their views of sufficient import to include a thirty-five page chapter on them in his well-known Lessons in Practical Anatomy of 1823.[52]

J. D. Godman, born at Annapolis, Maryland, "an anatomist of great talent, could not realize what was in himself, [we are told,] because . . . poverty literally pursued him from the cradle to the grave."[53] He attracted the attention of Daniel Drake (1785-1852) early in his career and at one time was a lecturer on surgery at the Medical College of Ohio at Cincinnati--he resigned there after the first term. He remained in Ohio long enough, however, to attain medical-historical fame by being the editor of the short-lived, but first, medical journal West of the Alleghanies, the Western Quarterly Reporter of Medical, Surgical, and Natural Science (1822-1823). In 1823 he became the second to assume charge of the "Philadelphia School of Anatomy"; and, in 1825 he became a member of the editorial

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[51]W. E. Horner, "Of the Anatomy of the Brain and Spinal Marrow, According to Gall and Spurzheim," in W. E. Horner, Lessons in Practical Anatomy (Philadelphia, 1823), p. 77.

[52]Ibid. For further information on Horner, see the Dictionary of American Biography, s.v. "Horner, William Edmonds," and Garrison, pp. 449-450.

[53]Garrison, p. 450.

board of The Philadelphia Journal of the Medical and Physical Sciences. He held a position at Rutgers for a time, but contracting phthisis (tuberculosis) early in life, he spent his declining years devoted to "literary work." He is most well-known for his Contributions to Physiological and Pathological Anatomy ([Philadelphia?], 1825), and his three volume American Natural History (n. p., 1826)--"the first original treatise on the subject."[54]

Godman, like Horner, held a great deal of respect for "the renowned, the indefatigable, the undefeated Gall" and Spurzheim.[55] In the curious treatise in which he makes reference to Gall and Spurzheim (n. 55), he also showed interest in a cause which, in later years, in the hands of the "phrenological Fowlers," would become a phrenological cause célebre--viz., he was opposed to the popular female habit of cinching their waists into hour-glass figures (i.e., "tight lacing").[56] Godman's most important effort regarding our current concerns was that, in a manner similar to the

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[54]Ibid., and, Dictionary of American Biography. s.v. "Godman, John Davidson."

[55]J. D. Godman, Addresses Delivered on Various Public Occasions by J. D. Godman with an Appendix, Containing a Brief Explanation of the Injurious Effects of Tight Lacing, Upon the Organs and Functions of Respiration, Circulation, Digestion, &c. (Philadelphia, 1829), p. 101.

[56]Compare Godman's work with O. S. Fowler, The Evils of Tight Lacing; or the Injury Inflicted on Mind and Body by Compressing the Organs of Animal Life, and Thereby Retarding and Enfeebling the Vital Functions (New York, 1842) and M. Stern, Heads and Headlines: The Phrenological Fowlers (Norman, Oklahoma, 1971), passim.

Philadelphia John Bell's reissuance of the volume by Combe, Godman republished the Edinburgh John Bell's (1763-1820) The Anatomy and Physiology of the Human Body (written with his brother Sir Charles) to which he added "important additions, from the writings of, Soemmering, Bichat, Beclard, Meckel" and Spurzheim.[57] In this edition he controverts Bell's dicta against phrenology, and concludes:

> This is the foundation upon which the doctrines of Gall and Spurzheim rest,--purely upon observation,--and this is the reason why these doctrines have so triumphantly outlived all the misrepresentation and violence of opposition.58

Samuel George Morton is really too important a figure to brush over lightly. I will not be able to do him justice, however, and must suggest that he is most certainly a personage worthy of a future in-depth study. In any event, much was written about him during the 19th century and many memoirs of his life appeared. Subsequent to his death on 15 May 1851, for example, no less than four separate memoirs were prepared relating his life and scientific merit--one by Charles D. Meigs, published under the direction of the Academy of Natural Sciences (Philadelphia); another by George B. Wood, "prepared by appointment of the College of Physicians of Philadelphia" a third by William R. Grant as a "Lecture, Introductory to a Course of Anatomy and Physiology in the Medical Department of Pennsylvania College"; and, lastly, a memoir by Henry S. Patterson included in a

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[57] 5th American ed. from the 6th London ed. of 1826, 2 vols. (New York, 1827).

[58] Ibid., 1:165, quoted in Boardman, p. 79.

publication of Morton's posthumous "inedited papers."[59] That Morton was revered, there is no doubt. In the latter work, for example, the author wrote at the outset

> At the [mere] mention of this name [Morton's] there arise emotions which press for utterance, and which it would do violence to my feelings to leave unexpressed. If I have felt this affection for him, it is only what was shared by all who knew him. What was most peculiar in him was that magnetic power by which he attracted and bound men to him, and made them glad to serve him. This influence was especially manifested . . . in the collection of his cabinet of crania.[60]

"The Society of Friends, by closing the pulpit and the bar against the able and aspiring among its youth," Patterson wrote further, "has given to medicine many of its brightest ornaments."[61] Being a Quaker, therefore, medicine for Morton, was the natural path to pursue. Morton took as his preceptor Dr. Joseph Parrish, and under his tutelage "attained

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[59] C. D. Meigs, A Memoir of Samuel George Morton, M.D., Late President of the Academy of Natural Sciences of Philadelphia . . . Read Nov. 6th, 1851 (Philadelphia, 1851); G. B. Wood, A Biographical Memoir of Samuel George Morton, M.D. . . . Read Before [The College of Physicians of Philadelphia] Nov. 3d, 1852 (Philadelphia, 1853); W. R. Grant, Sketch of the Life and Character of Samuel George Morton, M.D., Lecture Introductory to a Course of Anatomy and Physiology in the Medical Department of Pennsylvania College (Philadelphia, 1852); and, H. S. Patterson, "Memoir of the life and scientific labors of Samuel George Morton," in J. C. Nott, et al., Types of Mankind: or, Ethnological Researches Based Upon the Ancient Monuments . . . Illustrated by Selections From the Inedited Papers of Samuel George Morton [with contributions by] . . . Agazziz . . . Usher . . . etc., 6th ed. (Philadelphia, 1854), pp. xix-lvii.

[60] Patterson, p. xviii.

[61] Ibid., p. xxii.

his majority" in January 1820. In March of this same year he was awarded his "Diploma of Doctor of Medicine" and elected a member of the Academy of Natural Sciences at Philadelphia at the same time. It was with this society that Morton achieved his well-earned fame. In subsequent years he studied at and graduated from the University of Edinburgh, and in 1824 established practice in Philadelphia. His early years were spent mainly in geological researches. Furthermore, he does not appear to have publicly read (or published) his personally written formal papers until 1827. Although Morton eventually published works of considerable medical import, he is most well known today for his monumental interest in human crania as a result of which interest he published two works, viz., the Crania Americana (Philadelphia, 1839) and the Crania Aegyptiaca of 1844 (n.p.).

How or in what manner Morton was exposed to phrenological thinking for the first time is not known. He may, no doubt, have been exposed to ideas phrenological during his sojourn in Edinburgh when phrenology was reaching its zenith there. His early interest in comparative cranioscopy --wherein he determined to discover the ethnic resemblances and discrepancies by an examination of skulls--, however, certainly would have interested his medical confreres tied up more intimately with phrenology per se, and this may have prompted him to continue his studies. Human skulls, he discovered, however, were not easy to find. He commented on this some years later:

> Having the occasion, in the summer of 1830, to deliver an introductory lecture to a course of anatomy, I chose for my subject the different forms of the skull as exhibited in the five races of men. Strange to say, I could neither buy nor borrow a cranium of each of these races . . . I at once resolved to make a collection for myself.[62]

Twenty-one years from that date (1851) Morton had compiled a monumental collection consisting of 918 human crania (51 more were received after his death), 278 crania of mammals, 270 of birds, 88 of reptiles and fishes--in all, according to Patterson, 1656 skulls. This collection would be a storehouse, to say the least, of phrenological data--Morton's interests, however, were almost purely ethnographical, and he remained reserved concerning phrenology's tenets (although not uninterested).

> [Phrenology] . . . further teaches us [, he told his classes on one occasion,] that the brain is the seat of the mind, and that it is a congeries of organs, each of which performs its own separate and peculiar function. These propositions appear to me to be physiological truths; but I allude to them on this occasion [in a lecture on "The diversities of the human species"] merely to put you on your guard against adopting too hastily those minute details of the localities and functions of supposed organs, which have of late found so many zealous advocates.[63]

On 31 December 1838 George Combe visited Morton and had the opportunity to view his rapidly growing collection. He was to show Morton on that occasion, he tells us, "the method pursued by the phrenologists in estimating the dimension of the coronal region and anterior lobe of the skull."[64]

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[62] quoted in Ibid., p. xxix.

[63] Ibid., p. xxii.

[64] Combe, Notes, 1:187.

Combe met with Morton the following day to examine his mode of drawing the skulls from life.

The Crania Americana bears the publication date 1839. Included in this magnificent folio volume are not only Morton's speculations regarding "a comparative view of the skulls of various aboriginal nations of North and South America," his "essay on the varieties of the human species" (both subtitles for the work), and his beautiful engraved plates, but included in this work also are the phrenological measurements of the skulls which are displayed and an "Appendix" containing "phrenological remarks" by George Combe (dated 4 April 1839). Combe's essay occupies twenty-two pages of a work of about three hundred pages in length. It is not difficult to interpret this inclusion as a vote of confidence in phrenology insofar as it at least indicates that Morton felt that the phrenological data on the individual skulls and the remarks by Combe were of sufficient scientific merit to warrant inclusion. He most certainly would not have jeopardized his position as the leading ethnographer of the country (if not the world) by including data believed by others to be fallaciously based, if he did not believe in it himself.

The work was very well received when it appeared. Benjamin Silliman's New Haven journal--The American Journal of Science and Arts (for April, 1840)--, for example, opened its review with the remarks

> We hail this work as the most extensive and valuable contribution to the natural history

> of man, which has yet appeared on the American continent . . . The subject is one of great interest, and Dr. Morton has treated it in a manner at once scientific and pleasing, while the beauty and accuracy of his lithographic plates are not surpassed by any of the modern illustrations of science.[65]

The British Museum General Catalogue of Printed Books has attributed the review to George Combe.[66] But, certain statements in this review do not appear to be the type which would be made by an author in reference to his own work (i.e., Combe, if he was the author of the review, passes over his own contributions rather lightly). The British Museum, however, refers to a pamphlet edition of this article issued separately. I have not been able to locate a copy of that, and the review in the journal is unsigned. We do reaffirm from the review, however, that it was Mr. John Philips, "a gentleman of high mechanical talents"--Dr. Morton's co-worker--, who took the phrenological measurements with Morton. In the Crania Americana, furthermore, it is noted that after consultation with Combe, all of the "original" measurements were discarded and new ones retaken according to Combe's improved methods. In any event, Philips took the measurements while Morton simultaneously recorded them. It was Morton, however, by affixing his name to the title page, who expressed in this subtle authorial manner explicit acceptance of the phrenological ideas contained therein--ideas which, no doubt, had germinated in the

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[65] 37 (April, 1840):341.

[66] (London, 1966), 42, col. 342.

phrenological atmosphere of Philadelphia in the 1820's.

The Philadelphia Journal of the Medical and Physical Sciences continued its support of phrenology in other and later issues of the 1820's. In volume eight (1824) a very favorable review of the Transactions of the Phrenological Society (Edinburgh, 1824) and Charles Caldwell's Elements of Phrenology (Lexington, Ky., 1824) appeared--the latter work, the first American authored work in favor of the science (to be discussed).[67] But not all the articles were favorable. John P. Harrison was a more cautious critic of phrenology in the same journal in 1825--citing Warren at one point as his authority. The following year Spurzheim's Anatomy of the Brain (London, 1826) received exceptional reviews.[68]

In 1857 Dr. J. Aitken Meigs, Librarian of the academy of Natural Sciences at Philadelphia published a new Catalogue of Human Crania, in the Collection of the Academy of Natural Sciences there.[69] He noted that Dr. Morton's collection had been purchased for $4000 by forty-two generous gentlemen and presented to the Academy. Listed among the entries are two crania phrenologically marked, one

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[67] Phil. J. Med. Phys. Sci. 8 (1824):171-214.

[68] "Observations on Gall and Spurzheim's Theory. By John P. Harrison, of Louisville, Ky.," Phil. J. Med. Phys. Sci. 11 (1825):233-249, and Phil. J. Med. Phys. Sci. 12 (1826):356-357.

[69] (Philadelphia, 1857).

according to Spurzheim's system.[70] In the following year, Meigs published a pamphlet wherein he pleaded for "a uniform system by which the collection and promulgation of craniological statistics" might be promoted.[71] But the interest of Philadelphians in cranial and cerebral matters did not end there.

In the Transactions of the American Philosophical Society Held at Philadelphia for Promoting Useful Knowledge for 1908, Dr. E. A. Spitzka published a monumental study--one hundred and thirty-three pages in length--entitled "Study of the Brains of Six Eminent Scientists and Scholars Belonging to the American Anthropometric Society, Together With a Description of the Skull of Professor E. D. Cope."[72] In a manner similar to Gall, and later, Spurzheim, Spitzka reported that the "American Anthropometric Society" was formed--patterned after the "Mutual Autopsy Society" of Paris (1881)--in order that the brains of its members might be examined after their death (both Gall and Spurzheim had requested while living that upon their deaths their brains and skulls were to be examined and added to their respective collections [see "Epilogue," Chapter V]). The A. A. S. was

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[70] Ibid., p. 103.

[71] J. A. Meigs, Hints to Craniographers (Philadelphia, 1858), printed separately from the "Proceedings of the Academy of Natural Sciences of Philadelphia, August, 1858" [sic].

[72] 21 (Phiadelphia, 1908):175-308.

followed in this country by Professor Burt G. Wilder's "Cornell Brain Association." Spitzka reported that several brains of members of the A. A. S. had already been acquired --but accidents will occur, and Walt Whitman's brain which had also been acquired, was "said to have been dropped on the floor by a careless assistant."[73] Nevertheless, in Spitzka's prefatory remarks we find reports on the brains and/or skull capacities of personages who were involved in one way or another with this narrative. These include Gall, Spurzheim, Cuvier, Abercrombie, Lord Jeffrey (Editor of the Edinburgh Review), the German surgeon Walther (see Appendix A), Tiedemann, Bischoff, Broca, and Andrew Combe to name a few. We discover further that Cuvier's brain weighed more than Abercrombie's; Abercrombie's was much heavier than Broca's; that Gall's brain was lighter than the previous three; and, that Spurzheim's outweighed Gall's by 361 grams (1559 versus 1198). Spitzka discovered that there were significant differences between the brains of men of eminence and those of more common capacity.

Although Spitzka believed that "in a crude way everyone is a phrenologist or physiognomist," he concluded that his investigations corroborated only "our present-day knowledge [1908] concerning the localization of mental functions."[74] His research is of interest here since it indicates that a concern with craniology, cerebrology and their mutual

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[73]Ibid., p. 176.

[74]Ibid., p. 229

relationship in regard to mental functioning was still "alive and well" in Philadelphia, so to speak, one hundred years after Nicholas Biddle brought to that great city the skull phrenologically marked by Spurzheim.

Charles Caldwell (1772-1853): The "American Spurzheim"

"The American, who, above all others, distinguished himself by his zeal and labours in favour of phrenology [in the 1820's and thereafter]," Boardman wrote, "is Dr. Charles Caldwell."[75] No doubt, Caldwell seemed to deserve the sobriquet--"The American Spurzheim." But, Caldwell was one of those rare men in the history of science whose self-esteem outshined the approbation which history ultimately assigned to him. At least 209 books and articles flowed from his "controversialist" pen during his lifetime. But he has remained relatively obscure even though the late Emmet Field Horine, M.D. devoted his life to collecting Caldwelliana, preparing and publishing a privately printed limited edition devoted to Caldwell and his works,[76] and left his entire Caldwell collection to the library of the School of Medicine, University of Louisville. The recent republication of Caldwell's Autobiography--which Garrison contended was a "remarkable repository of medical scandal"[77]--may draw new historians into his world where they can pick up where Dr.

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[75] Boardman, p. 79.

[76] E. F. Horine, Biographical Sketch and Guide to the Writings of Charles Caldwell, M.D. (1772-1853) With Sections on "Phrenology" and "Hypnotism" (Brooks, Ky., 1960).

[77] Garrison, p. 443.

Horine so devotedly left off.[78] Horine lists thirteen biographical sketches of Caldwell noting that "no full length biography of [him] . . . has ever been published."[79]

Charles Caldwell was born 14 May 1772 in what was (in 1772), Orange County, North Carolina (now Caswell County). He was the youngest of ten children, only three of which survived beyond adolescence. The opportunities for education during Caldwell's early years were poor. He wrote in his Autobiography, for example:

> So rude and letterless, and so lamentably destitute of means and opportunities for education was the tract of country in which I was born, that notwithstanding all the exertions my father, and a few of his most enterprising neighbors could make, no school for me could be procured, until I had completed a portion (more, I think, than the half) of my ninth year. And to it I was obliged to walk a distance of more than three miles, along a slight and devious foot or cow-path, through a deep and tangled forest, infested by wolves, wild-cats, snakes and other animals, whose relation to man was the reverse of friendliness.80

In his twelfth year he commenced the study of Greek and Latin from his "Domine" (a Greek and Latin teacher)--an individual, who Caldwell tells us, had lips which "were so thin and skinny, tight-drawn, yet puckered over a set of long projecting teeth (making his mouth resemble that of a sucker),

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[78] C. Caldwell, Autobiography of Charles Caldwell, M.D. (New York, 1968 [1855]).

[79] Horine, pp. 124-130.

[80] Caldwell, p. 64.

that he could never utter a masculine sound."[81] Later, Caldwell entered an "academy" near home and, as Horine has stated, "at fifteen he had mastered all the learning which the schools of North Carolina could impart."[82] In 1792 he began his study of medicine when he entered the office of a Doctor Harris in Salisbury, in the Fall of that year he entered the University of Pennsylvania. While there, he studied with William Shippen (1736-1808), Caspar Wistar (1761-1818), Adam Kuhn (1741-1817), James Hutchinson (1752-1793), Samuel Powell (1759-1826), and Benjamin Rush.

Benjamin Rush clearly impressed Caldwell the most, and during his early association with him they developed a marked friendship. Caldwell relates in his Autobiography that he also associated with Rush on an informal level--a not too common occurrence at that time between teacher and student. He then states in what one discovers to be his characteristic immodest manner, that Rush

> . . . habitually sought out, and seldom failed to discover, the best gifted and most promising young men of his class . . . (and if they were also well educated so much the better), and, by attention and kindness, attached them to him as a man.[83]

Caldwell, of course, by implication, therefore, was one of the "best gifted" young men so selected. Rush's intent ostensibly was to gain adherents for his views. In Caldwell,

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[81] Ibid., p. 67.

[82] Horine, p. 1.

[83] Caldwell, p. 147.

however, Rush found an independent thinker:

> Rush intended by the . . . [friendship] to engage me [Caldwell] as an adherent to his views and opinions in medicine, instead of holding views and opinions of my own . . . [T]o whatever extent my vanity might have been gratified by the overture, my pride, which was far the stronger feeling of the two, would have [and did] instinctively reject it, and probably [would] have erected it into a permanent barrier to my future intimacy with him [which it did].84

The friendship between Rush and Caldwell lasted but a few years. Caldwell refused to accept Rush's theory "of the unity of fever" and, since independence of thought was not condoned among students of that period, the friendship was marred. Later their professional distance widened due to Caldwell's contention that Rush failed to credit him "with having pointed out the efficacy of cold water in the treatment of fever."[85] But Rush was able to provide Caldwell with consternation in later years, however, as a result of the latter's "disrespect." In 1796 Caldwell received his M.D. degree after a defense of the thesis entitled "An Attempt to Establish the Original Sameness of Three Phenomena of Fever." An argument broke out between Caldwell and Rush at that time, and Rush refused to sign Caldwell's diploma. It was only through the intervention of a mutual friend some years later that Rush finally agreed to sign it.[86]

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[84] Ibid.

[85] Horine, p. 2.

[86] Ibid., p. 6.

Caldwell began his publishing career by spending the Summer of 1794 translating Blumenbach's Elements of Physiology from the Latin. But, except for his thesis, he did not begin publishing professionally until 1801, and he had by this time established a medical practice in Philadelphia. Although he was elected to membership in the American Philosophical Society, his attempts to gain an appointment at his alma mater were in vain--Rush was blamed for this. During the war of 1812 Caldwell was "Physician General of the Volunteers and Militia Troops of Pennsylvania" and, at that juncture he became a member of the Philadelphia Board of Health.

In 1801 Joseph Dennie (1768-1812) had founded a new weekly publication, The Port Folio, which was said to be created "not quite a Gazette, nor wholly a Magazine, with something of politics to interest Quidnuncs, and something of literature to engage students."[87] It was to last until 1827. The Port Folio became an arena to combat revolutionary doctrines. As Mott described it, it was a "torch that sputtered and fizzed after the manner of the times." The Port Folio, for example, customarily ridiculed the treasured American beliefs contained in the Declaration of Independence, protested against its being read on the Fourth of July, and published at least one exposition on the "political

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[87] The Port Folio 1 (January, 1801):i. On the history of The Port Folio see Mott, 1:223-246.

imbecility" of Thomas Jefferson.[88] Caldwell's nature was naturally attracted to this controversialist publication. When Joseph Dennie died, Nicholas Biddle (mentioned earlier) had assumed the editorship; but, when the latter resigned the editorial chair in March 1814, Caldwell took charge. Although Caldwell had contributed to The Port Folio since 1809, when he took the editorial helm he "increased the declining circulation of the magazine by twenty-five percent within the first six months of his editorship"[89]--this success feeding, no doubt, his well developed but expanding ego. In any event, he contributed a great many articles to this venture, a listing of which is included in both his Autobiography and in Horine.[90]

In 1815 Caldwell was made a teacher at the University of Pennsylvania by the creation of the so-called "Physical Faculty"--Rush was now deceased. In this capacity he was made a professor of "Geology and the Philosophy of Natural History." He claimed to have been instrumental in establishing three medical schools during this era also--one in Philadelphia, another in New York, and a third at Baltimore. Declining positions at each he was ultimately invited to Lexington, Kentucky where a reorganization of Transylvania University was under way. It is from this base that Caldwell

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[88] Mott, pp. 227-228.

[89] Ibid, p. 240.

[90] Caldwell, pp. 429-436, and Horine, pp. 18-89.

launched his career as the "American Spurzheim," becoming even more controversialist in later years regarding a vast variety of medical and related and nonrelated interests. He was cognizant in later years, however, of the fact that, while he was a highly productive writer, he may have spread himself too thin. In his Autobiography he wrote

> . . . no one can be . . . more injudicious, and more unjust to his reputation and standing in science than I have been to mine. Had I confined my studies to a few subjects, and bestowed on each of them sufficient attention, I might, as I feel persuaded, have done something to distinguish myself, and transmit to future times a record of my existence and labors, of a much higher and more creditable order, than anything now in my power to bequeath to them. On the point here referred to, then, let no one fellow follow the example I have set; but let my recorded mismanagement operate as a warning of error and mischief, and be carefully avoided.[91]

The medical department at Transylvania which had been founded in 1798, did not offer official courses until 1817-1818. A medical library had been established there in 1799, however, and many of the original items are still extant. In 1821, about the time that John Wells of Bowdoin went to Europe with his modest budget, Caldwell was sent on a similar book buying mission with $17,000. He bought over 1100 volumes on this early venture and by 1827, Transylvania had the largest medical library of any medical school at that time--2700 volumes. It was during his stay in Europe in 1821 that Caldwell attended Gall's lectures and met Spurzheim. According to Horine, he "at once became a

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[91]Caldwell, p. 38.

a phrenologist and remained loyal against all criticism."[92] On his return from Europe (1821-1822) he delivered a brief course of lectures on phrenology to his medical classes at Transylvania, "the first [such] course ever delivered in the United States [Italics mine]."[93]

Around 1839, Boardman gave the following summary of his activities during these early years:

> . . . Doctor [Caldwell] has repeated . . . [his course on phrenology] to his successive classes, in that college [Transylvania], and the college of Louisville, every winter since that time [since c. 1821-1822]. In the Spring of 1822, he delivered a popular course to the citizens of Lexington. In 1823, he lectured at Louisville. In 1829, at Nashville. In 1825, at Baltimore and at Washington, which led to the formation of a phrenological society at each of those places. In 1826, he lectured again at Washington. In 1828, at Boston. In 1835, again at Nashville. In 1836, at Natchez. In 1837 at Philadelphia; and in 1838, at New York.[94]

As with his other medical crusades, phrenology provided Caldwell with the opportunity to curb "the spirit of animosity and mischief" roused against him, by all he did "toward the promotion of the knowledge of [controversial doctrines, but specifically] phrenology."[95] In phrenological terms, his organs of "destructiveness" and "self-esteem" were overly developed.[96]

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[92]Horine, n. 76, p. 11.

[93]Boardman, p. 79.

[94]Ibid., p. 80 (I use the 3d edition of this work. Boardman's "Essay" was actually first written about 1839.)

[95]Caldwell, p. 303.

[96]Amer. Phrenological J. 5 (New York, 1843):380.

> For many years he stood almost alone its [phrenology's] able advocate, its ever ready champion and defender, who, for every blast of obloquy, ridicule, and sophistry, directed against the novel doctrines, had an overwhelming counterblast of nervous argument and withering truth.97

"Since the year 1793 until the present date (1848)," Caldwell wrote, I was never "free from a contest against some opinions or doctrines which I consider[ed] erroneous."[98] "For many years I labored. . . . strenuously against violent opposition," he added, "and at first alone . . . for the first introduction into the country, and the ultimate establishment, of the science of Phrenology."[99]

In 1824 Caldwell published his Elements of Phrenology (Lexington, Ky.)--the first American authored phrenology text. A second edition appeared in 1827. The Phrenological Journal and Miscellany of Edinburgh hailed "The appearance of this little work with sincere pleasure" as one which displayed the "force, clearness, comprehensiveness, and depth of mind, which at once characterize the philosopher." "Let then the opponents" of phrenology, they continued, "ponder the result."[100] Other positive reviews appeared in the Transylvania Journal of Medicine, and in Chapman's The

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[97] Phrenological J. [and Misc.] 16 (Edinburgh, 1843): 127 quoted in Davies, p. 14.

[98] Caldwell, p. 303.

[99] Ibid., p. 400.

[100] Phrenological J. and Misc. 2 (Edinburgh, 1824-1825):113-120.

Philadelphia Journal of the Medical and Physical Sciences.[101] Daniel Drake's brother Benjamin warned his readers, however, that "combativeness" was overdeveloped in Kentuckians; and, therefore "Gentle and pacific citizens of Ohio, beware!"[102]

The Elements was not designed to present a new theory in that Caldwell did not intend to innovate and develop a novel interpretation of phrenology. His intention was simply to present the usual phrenological arguments as "proofs," outline the tenets of the science, and controvert certain accusations brought against phrenology by its opponents--including those brought against phrenology by Warren (previously mentioned). In Section I he dealt with the relationship between mind and matter. In Section II the question "Can the mind of man as a simple indivisible substance, a mere unit in essence, possess of itself, a plurality of faculties?" is asked and answered. In Sections III and IV he treats of the brain as the organ of the intellect and "refutes" objections to this position. In Section V he "shows" that "the brain is not a simple organ, but an aggregation of several" and, in the remaining sections, discusses the "usual" phrenological division of the faculties (Section VI), refutes accusations brought against phrenology that it favors "materialism," "fatalism," and the "legitimacy of crime" (Section VII), and ends with miscellaneous

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[101] 1 (1828):121-133 and 8 (1824):1710214 respectively.

[102] Cincinnati Literary Gazette 1 (1824):57-59, quoted in Horine, p. 49.

remarks directed at phrenology's critics, particularly the remarks of J. C. Warren (Section VIII). In general, it was viewed by the press as "a clear and satisfactory manual of the science."

Caldwell, as has been mentioned, wrote prolifically on a vast array of subjects. In a perusal of his bibliography, one discovers that he wrote on such diverse topics as the moulting of birds, the efficacy of sedatives, on malaria and temperament, on the modus operandi of medicines, on the vice of gambling, and so on. In addition to these original contributions, he reviewed a great many books; and, in later years, discovered himself in the position of vindicator of phrenology--answering in true polemical fashion charges against the science made by its antagonists. Since many of Caldwell's published vindications of phrenology occurred during the period 1832-1842 (and beyond), I will refrain from mentioning them here, and save those which are relevant for that period of time where they are more appropriately introduced. Suffice it to say that it was Caldwell, more than any other single American scientist in the period 1800-1832 who prepared the American mind for Spurzheim's triumphant visit. But Caldwell was only "figuratively" the "American Spurzheim," however, and no amount of charisma on his part would allow him, at that period, to deflect any of the light from Spurzheim's starring historical role. The sons of the prophet rarely equal their sire--and, Caldwell, although decidedly pro-phrenology, had too many other

medico-scientific interests to be considered only a phrenologist. Finally, one other event must be mentioned before leaving this era. That event was the appearance of George Combe's The Constitution of Man in 1828. For other commentary on Caldwell's views see the Western Monthly Review.[103]

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[103]1 (October, 1827):357-365, and Ibid., 1 (December, 1827):465-483.

The Constitution of Man and Other American Preparations

While Americans were slowly assimilating phrenological ideas, Europe particularly Great Britain and Scotland, were well along to being totally "converted." This has been discussed earlier in Chapter II. George Combe, who was to assume the role of proselyte par excellence both during Spurzheim's life and thereafter, was in the 1820's, a prolific writer and public lecturer. He had been "converted" to phrenology after attending one of Spurzheim's lectures in 1816, and published his first statement on the new science in 1817.[104] As was alluded to in Chapter III, in 1824 Spurzheim had shown Combe the manuscript for the former's A Sketch of the Natural Laws of Man. So impressed with this document was Combe that he sought to expand on its theme and did so on 2 February 1826 in an essay which he read before the Phrenological Society at Edinburgh. That paper was entitled "Human Responsibility as Affected by Phrenology." A great deal of controversy ensued within the society--some felt, for example, that his ideas should be suppressed. He continued to expand on them, however, and, in 1828, issued the first edition of The Constitution of Man Considered in relation to External Objects (Edinburgh).

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[104] G. Combe, "Explanation of the Physiognomical System of Drs. Gall and Spurzheim," The Scots Mag. and Edinburgh Literary Misc. 79 (1817):242-250.

It is an understatement to note that this work was one of the most astounding publishing successes of the 19th century. Jessop listed twenty-two editions of the work, and these were not all of them.[105] He missed, for example, listing the second American edition of 1833 (Boston). It has been stated that at least 300,000 copies had been sold by 1854. In addition, it was translated into at least six foreign languages and was produced in a special edition for the blind by Samuel Gridley Howe (see Chapter V). It is a further understatement to point out that this work became the most well-known and "inspirational" phrenological title of the 19th century. I have discussed this and other aspects of Combe's career in another source (see n. 36).

"The great object of . . . [this] Essay," Combe wrote in his opening remarks, is to exhibit the relations which are held between the physical laws, organic laws and moral laws and the constitution of man" with a view to the improvement of education, and the regulation of individual conduct." Appealing to the authority of Hutcheson, Adam Smith, Reid, Stewart and Thomas Brown, early authors of works on "moral science," Combe contended that his work was presented on the same plan as their's "with the aid of new lights afforded by phrenology."[106] I have summarized Combe's views elsewhere

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[105] T. E. Jessop, A Bibliography of David Hume and of Scottish Philosophy (New York, 1966), p. 116.

[106] G. Combe, The Constitution of Man Considered in Relation to External Objects, 2nd Amer. ed. (Boston, 1833), p. viii.

thusly:

> The natural laws include--for Combe--the physical, which govern the whole material system of the universe, the organic, which govern organic beings, and the moral, laws which are necessary to maintain social harmony. Infringement of any one of these laws is liable to bring either immediate or eventual destruction of the individual or the group. Combe argues that the social ills prevalent during the day [i.e., during his day], disease, war, political upheaval, economic problems, crime, mental illness, etc. were all attributable to ignorance and disobedience of the natural laws, and were, therefore, not attributable to Divine intervention. Obedience to the natural laws, for Combe, would result in the individual's feeling sensations of pleasure. This behavior, when learned, would be continued. Disobedience to these laws results in pain and sufferings, and behavior associated with this, logically, should discontinue. Since man does not know the natural laws innately, he has to be brought by means of education out of ignorance and into harmony with his world.107

Combe's philosophy, as one might gather, was a reaction against the fatalism of Socttish Calvinism prevalent at the time. With phrenology--and with an understanding of the natural laws and man's constitution in relationship to them --Combe saw an opportunity for a non-fatalistic, optimistic view of man's place in the natural order. Needless to say, this optimism was soon shared by many others--the clergy, however, remained opposed. By June, 1829 an American edition of Combe's work appeared. In the "Preface to the American Edition" it was observed that

> The author of the following work is known in this country by his Essays on

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[107]Walsh, "George Combe," p. 275.

> Phrenology [1822] . . . the object [of this work, it should be pointed out,] is human happiness in an extended use of the term. He says, in amount, to lessen misery and increase happiness is his great purpose, and to accomplish this, his labor has been to discover as many of the contrivances of the Creator, for effecting beneficial purposes as possible . . . The ernestness of truth is the prevailing characteristic [of the work], and a truly benevolent purpose marks every page . . . the publishers have printed this edition from a belief, that there is much in the work to interest the community . . . To all classes it is recommended . . .[108]

Shortly after The Constitution of Man was published, American reviewers began their analysis of it. The American Journal of Education, for example, published three articles on phrenology in 1829, two of them directed specifically at Combe's The Constitution of Man.[109] In the first of these articles the writer (allegedly J. Simpson) closed with the remark that

> The instructor of the young, and the advanced scholar must acknowledge their obligations to M. Combe for the important knowledge his work contains. We close by recommending it to the whole community.[110]

In the second article an anonymous writer again wrote

> The conclusions to which a reflecting mind may be led by the suggestions of this writer, form an intellectual and moral eminence from which the reader may contemplate new and boundless scenes of improvement, inviting equally the efforts of self-cultivation, and an enlightened and faithful endeavor to aid in the progress of others.[111]

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[108] Combe, The Constitution of Man, pp. vii-ix.

[109] Amer. J. Ed. 4 (1829):289-300; 506-531; 541-543.

[110] Ibid., p. 300.

[111] Ibid., pp. 510-511.

By the third article, the author felt obliged to note that the "editorial" we "are not among the enthusiasts of this newborn science," but we do "believe in some of its doctrines."[112] A southern reviewer, on the other hand, was very skeptical. While he confessed to be a believer in some of the general doctrines of phrenology, he denied that either organ or faculty could be detected by handling the scalp or measuring the skull.

In succeeding years, with each reissuance of Combe's work, the reviewers would pounce upon it. It remained a controversial opus throughout its career--as did phrenology itself. The second American edition was received with the same mixed reactions. By 1835 it had reached its 5th American edition; thus, the book, although controversial, still sold well. In 1832 a special trust was established in Edinburgh to facilitate the publication of this work by Combe and to perpetuate the science of phrenology in general, viz., The Henderson Trust (see n. 36). But of importance to our narrative is the fact that but one month before Spurzheim's arrival in Boston--i.e., July 1832--The Christian Examiner and General Review of Boston published a review of The Constitution of Man which was a straightforward, sober, dispassionate--and, generally favorable--analysis of it. While the reviewer claimed that he was not necessarily totally convinced that all the phrenological tenets were true,

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[112] Ibid., p. 541.

he still believed that it was highly probable "that a tree [that which has grown from phrenological theory] which bears such good fruit [Combe's The Constitution of Man]," must have a "sound and vigorous root [the basic assumptions of phrenology must be true]."[113] This review, no doubt, made the appearance of Spurzheim in the "Athens of America" one month later a bit more acceptable then it might have been if the review had not appeared.

In the aggregate, one might say that in the years prior to 1832, Americans knew enough about phrenology to have reached some sort of temporary verdict as to its ultimate value. The Philadelphia physicians were exploring it scientifically, Caldwell was lecturing on it peripatetically, a few journals were reviewing phrenological works, phrenology was being discussed in medical schools, and several societies were formed to study it further. But in Caldwell and the others all was still second hand, i.e., America was yet to hear the voices of the originators of phrenology on its shore. No doubt they had many questions which needed elucidation--elucidation which could only come from direct confrontation with the authorities. Furthermore, Caldwell, although inspirational, apparently had only an ephemeral effect on his auditors--as was mentioned before, he was only "figuratively" "The American Spurzheim," i.e., he was so only since he stood out by comparison as being more

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[113] The Christian Examiner and General Rev. 12 (July, 1832):401.

enthusiastic than others, others who had only an erratic and unsustained nonevangelical interest in phrenology. For example, when Frances Trollope was in Cincinnati early in 1828, she attended Caldwell's lectures there (c. 5 April 1828). She refers to him as "The Spurzheim of America," but notes that while

> He has studied Spurzheim and Combe diligently, and seems to understand the science to which he has devoted himself . . . Neither his lectures nor his conversation had that delightful truth of genuine enthusiasm, which makes listening to Dr. Spurzheim so great a treat.[114]

Mrs. Trollope added further that a Phrenological Society was immediately founded after Caldwell's lectures. At the first meeting officers were selected. At the second meeting only half the original number attended during which, in any event, sufficient rules, laws, and resolutions were passed "to have filled three folios." She describes the third day thusly:

> A third day of meeting arrived, which was an important one, as on this occasion the subscriptions were to be paid. The treasurer came punctually, but he found himself alone. With patient hope, he waited two hours for the wise men of the west, but he waited in vain: and so expired The Phrenological Society of Cincinnati.[115]

What America needed was a phrenological "shot in the arm." It needed "that delightful truth of genuine enthusiasm, which . . .[made] listening to Dr. Spurzheim so great a

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[114]F. Trollope, Domestic Manners of the Americans (New York, 1949 [1832]), p. 68.

[115]Ibid., pp. 68-69.

treat." Early in 1832 Spurzheim began receiving pressing invitations to visit the United States. He accepted these invitations, and with a desire to study the Indians, the condition of the slaves in the South, and to spread his doctrine on this continent, he left France in June 1832 and arrived in New York in early August.

CHAPTER V

SPURZHEIM'S AMERICAN TOUR AND THE SCOPE OF HIS INFLUENCE AT AND AROUND 1832

An indication of the import or quality of Spurzheim's social relations while in Boston in 1832 may be gained by an examination of a research project which began in 1920. Early in that year the need for a comprehensive dictionary of American biography prompted the newly formed American Council of Learned Societies to appoint a committee to consider the preparation of such a work. After deliberation and the search for, and acquisition of, funding the editorial offices for the project were opened in Washington in February 1926. The Committee of Management decided not to include in the work living persons, persons who had not lived in the territorial boundaries of the United States, and British officers serving in America after the Colonies had declared their independence. In 1928 the first volume appeared under the editorship of Allen Johnson (New York). Currently, the series includes twenty-two volumes (1928-1958) plus an Index and two supplements. Of interest to us here is the fact that, in addition to the aforementioned restrictions for inclusion in the work, the following restrictions were also adopted. It was agreed that only those individuals would be included

> . . . who have made some significant contribution

> to American life in its manifold aspects. The Dictionary . . . [could] not find space for average or merely typical figures, however estimable they may be.1

When Spurzheim came to America and lectured in Boston in the fall of 1832, he was there for but eighty-two days before his untimely death. Since he was most certainly a "man of science" who would be warmly welcomed by the literati of that great city, one can well imagine that he made many friends even in this rather brief period of time. Yet it seems remarkable to this writer that, during a period when communications were, to say the least, not as efficient as they are today, and less than twelve hours after his death, on Sunday morning 11 November 1832, an assemblage of twenty-five prominent men gathered at his apartment to determine procedures relative to his remains. Out of this assemblage of twenty-five, sixteen are listed in the Dictionary of American Biography (or 64%). They were Josiah Quincy, Nathaniel Bowditch, Joseph Story, Joseph Tuckerman, Charles Follen, Charles Beck, John C. Warren, James Jackson, George C. Shattuck, Walter Channing, John Ware, John D. Fisher, Samuel G. Howe, John Pickering, Thomas W. Ward, and Nahum Capen.[2]

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[1]Dictionary of American Biography, 22 vols. (New York, 1928-1958) 1:vii, hereafter abbreviated American Biography.

[2]Listed with others in A. A. Walsh, "The American Tour of Dr. Spurzheim," J. Hist. Med. All. Sci. 27 (1972): 187-205. See also American Biography, s.v. "Josiah Quincy" (15:308); s.v. "Nathaniel Bowditch" (2:496); s.v. "Joseph Story" (18:102); s.v. "Joseph Tuckerman" (19:46); s.v.

The remaining figures at that meeting were more provincial in import and need not be mentioned. The point is that this sampling, restricted as it is to only those who assisted in the preparation of the funeral obsequies for Spurzheim, does not include other equally meritorious personages in the history of American arts, science, medicine, psychiatry, etc. who were his intimates during that peripatetic autumn visit. No doubt the camaraderie of men of science was greater during the early 19th century when the

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"Charles Follen" (6:491); s.v. "Charles Beck" (2:113); s.v. "John C. Warren" (19:481); s.v. "James Jackson" (9:545); s.v. "George C. Shattuck" (17:31); s.v. "Walter Channing" (4:3); s.v. "John Ware" (19:449); s.v. "John D. Fisher" (6:409); s.v. "Samuel G. Howe" (9:296); s.v. "John Pickering" (14:564); s.v. "Thomas W. Ward" (19:441) and "Nahum Capen" (3:481). Others from that original assemblage, although not in American Biography attained more local fame in the Boston area, e.g., Winslow Lewis, who is also credited as being the American translator of Gall's works, and Jonathan Barber--then Instructor at Harvard--who delivered the first address to the Boston Phrenological Society 31 December 1832. Another, Dr. George Parkman, who was also present at that meeting, had fame thrust upon him in a peculiar way. Parkman for one thing donated land for the medical school expansion program at Harvard in the 1840's. Truax has recently discussed this and Parkman's involvement with John Collins Warren (see R. Truax, The Doctors Warren of Boston [Boston, 1968], pp. 202-210). More interesting, however, is the fact that Parkman was the victim of heinous murder by a fellow medical colleague at Harvard on 23 November 1849--the colleague was John W. Webster American Biography (19:592-593). In a frantic attempt to cover up his crime, Webster allegedly dismembered Parkman's body. "Thus," Carlson wrote, "George Parkman became the corpse in what has been called 'America's classic murder'." While Carlson pointed out Parkman's important role in the history of psychiatry, (see E. T. Carlson, "The Unfortunate Dr. Parkman," Amer. J. Psychiat. 123 [1966]:724-728), Sullivan has discussed the case from his more legalistic perspective (see R. Sullivan, The Disappearance of Dr. Parkman [Boston, 1971]).

division of the sciences was less clearly marked, and less encumbered by large numbers of people. No doubt also, since Spurzheim was a solitary traveler, the attention he receivd was tantamount to simple common courtesy by a group of men toward a fellow labourer in the vinyard of science. Furthermore, one might suggest that inclusion in the Dictionary of American Biography based on one's contributions made during the 19th century does not mean much when compared to today --i.e., if you had any intelligence at all during that period you probably would have had a greater opportunity to make what would be viewed by later generations as "significant contributions to American life." An equal effort today, one might argue, will not result in one's work being characterized as important by future generations. Therefore, the men Spurzheim associated with are not as important as one would think simply because they were included in the Dictionary of American Biography, i.e., they were simply common men of uncommon intelligence acting in an uncommonly adventitious period of time. But all is relative, as any good clinician knows, and we must conclude, I believe, that Spurzheim attained and maintained an extraordinary high level of approbation by a group of extraordinarily talented men during that eventful autumn in 1832, and that this is reflected in part by the fact that upon his death his remains were attended to by a group, the composition of which included the leading prominent figures of the era.[3] To the events

[3]Josiah Quincy, Joseph Story, Nathaniel Bowditch and

which immediately preceded that sad meeting of 11 November 1832 we must now turn.

William Ellery Channing--all of whom Spurzheim knew that fall in 1832--, are listed also in Forty Boston Immortals (Boston, 1910).

Spurzheim's Travels in America, 1832

In the tradition of the 19th century traveler, Spurzheim kept a small notebook in which he detailed his impressions of America during his travels here, and gave a brief account of his experiences. The fragment of this work which has come down to us was never published. It bears the same working title, however, which has been given to this section. The fragmentary remains of this manuscript are now in the collection of the Countway Library of Medicine at Harvard Medical School. It is unfortunate indeed that this document is not complete. For, in addition, it appears to have been a rather hastily prepared work--hastily prepared, as the reader will discover, due to the fact that during Spurzheim's brief sojourn in America, he rarely had a moment to himself. Recently, this writer gleaned from a number of sources and published a fairly complete account of Spurzheim's American tour--the only "complete" contemporary account of which he is aware. He will draw on this published source in part on occasion and others, therefore, in this transitionary chapter; however, this chapter is designed to supplement that earlier effort.[4]

By the spring of 1832, Spurzheim had resolved to visit the United States. Having received what we are told were "pressing invitations" to make such a visit, he began

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[4]Walsh.

to prepare for the voyage. "He was always a sufferer from sea-sickness," Carmichael has contended, "and to encounter a long . . . [voyage], with such a constitutional predisposition, required some magnanimity."[5] We are told further that while his friends were remonstrating with him on the imprudence of his decision to come to America, they inquired of him what could possibly compensate him for such a journey. "His simple and emphatic reply was, '<u>Shall I not see Channing</u>?'" The Channing Spurzheim referred to in this instance was William Ellery "who fathered Unitarianism" in this country, and was the man who "became the leader of the break from Calvinist orthodoxy."[6] But Spurzheim was to see little of this benevolent man. When Channing wrote to William Rathbone on 11 November 1832--in reply to a letter from Rathbone to Channing delivered to Channing by Spurzheim --he commented

> Unfortunately I saw little of your friend [Spurzheim]. On his arrival I was at my country residence, where I became seriously ill. On my return to this city [Boston], four weeks ago [the week of October 7-13, 1832], I had an interview with him, and before I was able to repeat it he was too ill to visit me. The good man was taken

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[5] Carmichael quoted in N. Capen, <u>Reminiscences of Dr. Spurzheim and George Combe: and a Review of the Science of Phrenology From the Period of its Discovery by Dr. Gall, to the Time of the Visit of George Combe to the United States, 1838, 1840</u> (New York, 1881), p. 6.

[6] Ibid.; <u>American Biography</u>, s.v. "William Ellery Channing," and E. Douglas Branch, <u>The Sentimental Years: 1836-1860</u> (New York, 1934), p. 326.

away in the midst of his hopes.[7]

There were other more "evangelical" reasons, however, for Spurzheim's visit. He was particularly interested of course in propagating the doctrines of phrenology as he had in England. In addition, he wished to study the "genius and character" of Americans, visit the "various tribes of Indians," and examine "the mental and physical condition of the slaves in the South."[8] As with his resolve to befriend Channing, his other desires would be only partially fulfilled.

During the 1830's, Boston, as the "cultural center of America," was attracting many intellectual and professional emigrants. Furthermore, it attracted many so-called "political refugees" from such countries as Ireland,[9] and many emigrants were to be on board ship when Spurzheim came across. On the 20th of June 1832 Spurzheim left Le Havre for the United States. He came by "sailing ship" rather than steamship since the latter at that time were considered "not only unsafe, but impracticable."[10] It was then customary for the American sailing packets to avoid the expense of a ship's physician; thus, "passengers on a voyage incurred great risks for the want of one, unless supplied by a chance traveler

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[7] W. H. Channing, The Life of William Ellery Channing, D. D. (Boston, 1880), p. 615.

[8] Capen, p. 8.

[9] O. Handlin, Boston's Immigrants 1790-1865: A Study in Acculturation (Cambridge, Mass., 1941), p. 33 and passim.

[10] Capen, p. 6.

of the [medical] profession." "On board ship," Spurzheim is said to have

> proved himself a friend in need to a number of . . . emigrants, many of whom, being taken sick on their passage, experienced his kind and successful medical assistance.11

He was, we are further told, prompt to meet all emergencies which arose which called for medical aid. Related to this, in a letter he received 13 September 1832, a friend in Paris wrote on hearing that he had aided the emigrants

> that you, my dear friend [Spurzheim], have rendered yourself on board the vessel so useful by your talent as a physician, ought to reconcile you to the medical science. Many of these poor men [the emigrants] would perhaps have perished without your aid; and the fact that all were saved, is for you no small blessing.12

To this Spurzheim's brother-in-law J. Perier added in that letter

> My wife joins me and our friends in expressing our joy on account of your happy arrival, and to offer our prayers for your well-being. May the cholera spare you, as it spared you in Paris. We trust it will be as gracious to you in America.13

The cholera which Perier referred to was internationally rampant in 1832. It had appeared in New York on June 21st according to Garrison and Emerson, and 3,000 people are said to have died there.[14]

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[11] Ibid.

[12] Ibid., p. 7.

[13] Ibid., p. 8.

[14] Quoted in Walsh, p. 187.

Spurzheim arrived in New York a little over a month later on August 4th. In his "Notes Concerning my Travelling in the U. S. of America" Spurzheim wrote simply:

> I arrived in N[ew]. York the 1st Saturday, 4th of Aug. 1832 [;] remained there till the 11th, when I went to N[ew]. Haven to [the] Franklin Hotel . . . 15

Spurzheim commented little in his notes concerning his stay in New York, and the comments he did make--as with the notebook in general--are difficult to decipher. In one section, however, entitled "on [the] population and health of the Americans of the U. States" he gives the following remarks on the effects of the cholera in New York City:

> At my arrival in N. York I was told that between 80 and 100,000 had left the city on account of thi[s species?] of the cholera! The common people look poorly,.... . There are many abodes [?] underground in . . . [?] houses . . . [?] toward the North and East rivers the boarders are marshy ground . . . [?] [The something or other] and [something or other] are all lined with wood which constantly decays and is subject to putrefaction.[16]

Since Asiatic cholera is due to the vibrio cholerae which is contained in the discharges of the bowels and becomes disseminated by means of drinking water, Spurzheim may have been commenting in the latter part of the above quote on the sanitary conditions in New York regarding either the storage of drinking water or the control of sewage or both.

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[15] J. G. Spurzheim, Notes, n. d., Boston, Harvard Medical School, Spurzheim MSS.

[16] Ibid.

In any event, it is his only comment on the health of New York City. It is almost impossible to read in the original.

Spurzheim remained in New York for a week leaving for New Haven the following Saturday, August 11th. The seven-hour ship voyage from New York was uneventful. In his notes, he informs us that the "line of packets" was interrupted from New York to New Haven on account of the cholera --"it [sic] sailed only every other day." It cost him $.25 for his luggage and passage from the boat dock to the Franklin Hotel; and, he adds that while he did not tip his waiter in New York, he did tip the porter [in New Haven] one-half dollar. "In N. Haven," he continued, "there were only Negro servants." It was in New Haven that Spurzheim gained his first friendship with American men of science. While there he became acquainted with Benjamin Silliman and with the other members of the faculty at Yale. Silliman is said to have stated that the professors at Yale loved him. He attended commencement exercises at Yale, attended the annual meeting of the "society of the Alumni," and dissected a brain of a hydrocephalic child who had recently died giving

> . . . great satisfaction to the medical gentlemen present by the unexampled skill and the perfectly novel manner in which he performed the dissection.17

He remained in New Haven until Thursday, August 16th at which

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[17]Capen, p. 9, and discussed in Walsh, p. 189.

time he left for Hartford. While there, he became acquainted with the famous alienist Amariah Brigham.[18] In addition, Spurzheim was able to visit the Asylum for the Deaf and Dumb, the State Prison at Wethersfield, and the Retreat for the Insane. In his visits to these institutions he was accompanied by Brigham and other physicians of the Hartford area. On 22 May 1833 Brigham wrote Capen concerning some of these events. He stated in that communication that

> I have many interesting facts respecting Spurzheim's visit to the Prison, Insane Retreat, Asylum for the Deaf and Dumb, etc. I presume he did not take so full notes as he would have done had he not expected soon to return here [sic] . . . The warden of the Prison [, furthermore,] has assured me that Dr. Spurzheim gave the characters of many of the criminals, especially of the noted ones, as correctly as he himself could have done who had long known them.19

When Capen published his "Biography" of Spurzheim in the latter's 1833 Physiognomy he noted that he found in Spurzheim's journal the following remark "respecting one of the prisoners confined at . . . [the prison at Hartford]:"

> One Johnson, a negro, had great facility for learning to read and write. The chaplin hopes, but I fear for him. He has individuality, eventuality and language large; but the sincipital region [the anterior and upper part of the head;

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[18]See on Brigham, E. T. Carlson, "Amariah Brigham: I. Life and Works," and "Amariah Brigham: II. Psychiatric Thought and Practice," Amer. J. Psychiat. 112 (1956):831-836, and 113 (1957):911-916. Also see American Biography, s.v. "Amariah Brigham."

[19]Capen, pp. 9-10.

also called the bregma] small.[20]

I have not found this remark by Spurzheim in his Notes to verify Capen's quote. It was probably contained in signatures missing from Harvard's fragmentary copy. In any event, Capen felt obliged to note in a footnote to that quote (n. 20).that Spurzheim's observations regarding Johnson were soon confirmed. He gave the following remarks there:

> On the night of April 30th [1833], a Mr. Hoskins, one of the prison guards at Wethersfield, was murdered by four convicts, under the most appalling circumstances . . . These convicts made an attempt to escape, and the murder was a part of their plan. It is a remarkable circumstance that the judgement of Spurzheim should be so soon verified, and that this same Johnson should happen to be one of the four! They declared, however, that it was not their intention to have killed Hoskins, but only to have disabled him [n. 20].

Apart from the fact that there is a bit of contradiction in Capen's remarks--he states that murder was part of the convicts' plans and that they had not intended to kill the guard--, he seems to be suggesting that Spurzheim's "fearing" for Johnson due to the latter's paucity of intellectual faculties was a "phrenological hit" insofar as he read into Spurzheim's remarks the prediction that Johnson was destined for some malicious act (an act not based on reason and the sincipital intellectual faculties, but one prompted by

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[20] N. Capen, "Biography of J. G. Spurzheim," in J. G. Spurzheim, Phrenology, in Connexion with the Study of Physiognomy (Boston, 1833), p. 106.

uncontrolled temporal and occipital animal propensities). In the same letter from Brigham quoted above, however, Brigham informed Capen that the Johnson alluded to by Spurzheim was not the same one involved in the prison disruption. Rather than admit that Spurzheim's observation was therefore irrelevant, Capen inserted the following remarks on an errata sheet inserted in his work:

> Note. After the Biography had been placed in the hands of the binder, we received a letter from Dr. Brigham [22 May 1833], Hartford, stating that the Johnson alluded to in page 106, was not concerned in the late conspiracy and murder at the State Prison; but another, a more recent convict of the same name. The one alluded to by Dr. Spurzheim 'gives good promise of having reformed.' We correct the error with pleasure [Italics mine].21

What Capen did here in effect was to reinterpret Spurzheim's remarks, singling out now the positive aspects of them, and, by correcting "the error with pleasure" suggest that Spurzheim was still correct all along. It was this type of double or selective interpretation of facts which would eventually give phrenology a bad name. Critical observers of such attempts to cover interpretive errors could not remain silent for long. When phrenologists increasingly resorted to high probability statements and "glittering generalities" they very soon drew out of hiding critics who saw through such remarks. A posteriori and post hoc rationalized reasoning has no place in science. It almost amounts to collecting the data and then developing the

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[21] Ibid., insert following title page.

hypotheses. In any case, Capen added on this same errata sheet "a fact more interesting and important," he contended, "than the statement which has reference to Johnson," viz.,

> Dr. Brigham visited the prison in company with Dr. Spurzheim . . .
> 'It is a little remarkable,' says Dr. Brigham, 'that when I visited the prison with Dr. Spurzheim, he pointed out the two leaders of this [above mentioned] conspiracy and murder as very bad criminals. The negro, Caesar Reynolds [a cast of whose head is now in the Spurzheim collection at Harvard Medical School], who, from the testimony, it appears actually committed the murder, he noticed when at some distance, and remarked, "that negro interests me much," and begged the liberty of examining his head minutely, and after he had done so, he said that he had the best formation intellectually of any negro he ever saw; (and he is far superior to most blacks,) but stated that he was a wretched and dangerous man, capable of doing any wickedness, and one that would persevere in iniquity.'[sic]22

If we can trust Brigham in this instance, the criticism alluded to above would be best directed not at Spurzheim, but at his interpreter, Nahum Capen.

In Spurzheim's journal fragments which this writer has perused, little additional information is given regarding his experiences in Hartford. He does comment, however, that he became acquainted there with Thomas Hopkins Gallaudet (1787-1851), founder of the American Asylum for the Deaf at Hartford. This was the first of its kind in the United States, and the first benevolent institution in the U. S. supported by an appropriation of public money

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[22]Ibid.

(1816).[23] The last entry in this section of Spurzheim's Journal which deals with traveling specifically reflects his concern with what were to him novel American customs:

> It is a curious/I cannot say just/custom in America, not only in the hotels, but also at the boarding houses, to have a fixed price per day or per week, for eating breakfast, dinner and tea, and on some places supper as at N. Y. You must pay, whether you take the dinner or any other meal or not. I had dined out twice in N. Haven, but was obliged to pay as if I had dined at home. They say I've prepared the same dinner &c. [i.e., the innkeepers must say that] This may suit the hotelkeepers but is unjust [sic].24

On Monday, August 20th, Spurzheim left for Boston; and, "It was half past 11 o'cl[ock, P. M.], "he wrote in his journal,

> when the stage arrived . . . [there]. There was no room to be got at the Tremont's House . . . [and] I was brought to the exchange Coffee house. I paid for bed-breakfast and dinner one dollar. I left it for my private lodgings 3 Pearl st. at [Sarah] LeCain's/ mother & daughter/tuesday 21 aug [sic] 25

The interested reader will find historical and other commentary on these "famous" Boston landmarks in both Dearborn and Drake.[26] Mrs. LeKain's (also spelled LeCain) boarding-

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[23] R. E. Bender, The Conquest of Deafness: A History (Cleveland, 1970), p. 126, and American Biography, s.v., "Thomas Hopkins Gallaudet."

[24] Spurzheim, n. 15.

[25] Ibid.

[26] N. Dearborn, Boston Notions: Being an Authentic and Concise Account of "That Village," From 1630 to 1847 (Boston, 1848)-Spurzheim's monument in Mount Auburn Cemetery is mentioned on p. 417, and S. A. Drake, Old Landmarks and Historic Personages of Boston (Boston, 1900).

house was a famous Boston landmark in 1832, it having been a mansion formerly belonging to Mr. John Prince. It seems particularly curious to this writer that in Drake's history of Boston published in 1900 (n. 26) he mentions Mrs. LeKain's home suggesting that its major claim to fame--since he mentions no others--was that in that

> . . . house John Gaspard Spurzheim, the gifted Prussian phrenologist, resided during his visit to Boston, and here, also, he died, in the same year.[27]

Shortly after settling in Boston, Spurzheim's arrival was announced in the Boston papers, the Daily Atlas and the Daily Transcript.[28] "Curiosity was soon awake," Capen commented, "to see a man whose fame had so long preceded him, and who had attracted the attention of the whole civilized world."[29] "The rich and the learned," he continued,

> the student and the scholar, soon paid him their respects, as due to a distinguished stranger, and a course of polite engagements was at once commenced. All who called upon

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[27]Drake, p. 275. "Mrs. Sarah LeCain or LeKain's boarding-house was then [1832] at No. 3 Pearl Street. She appears in the Boston Directory as early as 1823 as residing in Pearl Street and as late as 1837, when her boarding-house was at Nos. 4 and 5 Pearl Street. No. 3 was the third door from Milk Street on the east or harbor side . . . Thomas Minns states that 'up to 1840 or later the street was numbered 1 to 12 on the east side from Milk to High Streets and 13 to 22 on the west side, returning.' Mrs. LeKain died 5 October 1843, at the age of 87 (Boston City Records; Mt. Auburn Cemetery Records and Monument)" (from notes appended to a letter from Nathaniel I. Bowditch to his brother Henry I. Bowditch in Colonial Soc. Mass. Publ. 10 [Boston, 1907]:77-82).

[28]Boston Daily Atlas, 23 August 1832, and Boston Daily Evening Transcript, 23 August 1832 respectively.

[29]Capen, Reminiscences, p. 10.

> him soon became his admirers, and he was made the leading topic of the day, both in conversation and in the public prints.30

Spurzheim's intention was to remain in the United States for about two years. His reasons for coming to this country were previously noted. Pursuant to those interests he planned to remain in Boston perhaps only until early in 1833 at which time he would leave there to "lecture in the principal towns" of the United States, "then visit the different tribes . . . of Indians," examine the condition of the slaves in the South, and return to Paris.[31] Thoughts of Paris where some of Spurzheim's "most intimate friends" resided, however, gave rise "to feelings of homesickness" on Spurzheim's part, according to Charles Follen (1796-1840); but, these

> were soon merged . . . in that universal benevolence which made him consider any portion of the human family with which he happened to be connected, and to whom he could do some good, as his nearest relatives.32

Spurzheim, moreover, had made the acquaintance of a number of Bostonians in Europe--Bostonians, no doubt, who were there (in many cases) to study French medicine--which must have assuaged his "homesickness" somewhat. To 1830 Boston medicine was said to be dominated predominantly by English

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[30] Ibid.

[31] C. Follen, Funeral Oration: Delivered Before the Citizens of Boston Assembled at the Old South Church, Nov. XVII. At the Burial of Gaspar Spurzheim (Boston, 1832), p. 14.

[32] Ibid., and American Biography, s.v. "Charles Follen."

and Scotch medicine "in both origin and character." From 1830 to 1840, however, this characteristic was to change as a direct result, according to Viets, of John Collins Warren's (1788-1856) influence (cf. Chapter IV). Warren, according to Viets, was "the first of the important [medical] men of the nineteenth century to study in Paris."[33] Warren, who was actually from an older generation, had studied in Paris from 1801-1802 with Baron G. Dupuytren (1777-1835). While there, he first learned of Gall's "craniognomy." But, during the 1830's American medical students became increasingly attracted to Paris--particularly to Pierre-Charles-Alexandre Louis (1787-1872)--and in the year 1832 increased their numbers going abroad (a few students, some from Philadelphia, had gone before this date). Oliver Wendell Holmes (1809-1894) has spoken of the "idolatry" of American students for Dr. Louis, Sir William Osler (1849-1919) listed at least thirty-seven students who went abroad to study just with him, and, according to Ackerknecht, "it is no exaggeration to say that American medicine still bears his imprint."[34] But the man who was perhaps Spurzheim's earliest American friend was not a physician. That man,

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[33]H. R. Viets, A Brief History of Medicine in Massachusetts (Boston, 1930), p.135, and American Biography s.v., "John Collins Warren."

[34]E. H. Ackerknecht, Medicine at the Paris Hospital: 1794-1848 (Baltimore, 1967), pp. 102-103; American Biography, s.v. "Oliver Wendell Holmes," and s.v. "Sir William Osler."

however, would eventually republish Spurzheim's writings and write two of the four main biographical sketches of him. That man was Nahum Capen (1804-1886).

Nahum Capen, "publisher and publicist," a "miscellaneous writer" and one-time postmaster of Boston, the son of Andrew Capen (1757-1846), was born at Canton, Massachusetts 1 April 1804. According to his biographers, Capen was always considered to be a precocious child. After the "ordinary Latin school education of the day," for example, and when just nineteen years of age (in 1823), he "rewrote Plutarch's Lives for popular consumption."[35] This work, however, remained unpublished. According to one source, his first published book, The Republic of the United States of America, its Duties to Itself . . . Embracing Also a Review of the Late War Between the United States and Mexico (New York), did not appear until 1848. Earlier than this, however, he had written papers on free trade (1823), moral science, physics and education, and, in 1828, wrote--albeit anonymously (see the National Union Catalogue[36])--The Mental

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[35]Biographical information on Capen has been gleaned from the following sources: American Biography, s.v., "Nahum Capen"; The National Cyclopaedia of American Biography, s.v., "Nahum Capen," and, E. Burke, "Nahum Capen," U. S. Democratic Rev. 41 (May, 1858):397-412. Also see, W. R. Cutter, ed., Genealogical and Personal Memoirs Relating to the Families of the State of Massachusetts, (Boston, 1910) pp. 2157-2158, and "Obituary Notice" of N. Capen, in Boston Daily Evening Transcript, 9 January 1886.

[36]94:432.

Guide, Being a Compend of the First Principles of Metaphysics Predicated on the Analysis of the Human Mind (Boston). In this work he intended

> . . . to make a proper division of Metaphysical Principles as advanced by Locke, Stewart, and others, and apply them in some measure to use--that the science may be entered upon with less difficulty than before.[37]

Fay mentions this work only by noting that it is a "minor work" which "deserves passing notice"--he does not attribute it to Capen.[38] The work was published by "Marsh & Capen, and Richardson and Lord" of Boston, the former of which evolved into the publishing firm of Marsh, Capen & Lyon--a firm which Capen had become involved in in 1825. In his capacity as publisher, and, in addition to publishing Spurzheim's works, he eventually attained fame as an early sympathizer of "an international copyright law";[39] but, his introduction to Spurzheim and phrenology is our main interest here.

"Of all . . . [Capen's] multifarious activities outside the publishing field," one biographer has written,

> that with which his name is most closely identified is phrenology. He early became a convert to the phrenological system of Spurzheim and Gall [n. b. the junior author here], and when Spurzheim came to Boston from Germany . . . Capen

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[37]p. iv.

[38]J. W. Fay, American Psychology Before William James (New Brunswick, N. J., 1939), pp. 109, 199, 223.

[39]J. Tebbel, A History of Book Publishing in the United States: Volume I: The Creation of an Industry: 1630-1865 (New York, 1972), p. 559.

> speedily became his chief disciple and confidential friend, though the German scientist was fifty-six and his American admirer only twenty-eight.[40]

Another biographer simply noted that Capen "became the confidant and advisor of the distinguished visitor [Spurzheim],"[41] while a third added that

> At the request of Spurzheim his friend, then visiting this country . . . [Capen] examined the subject of phrenology, of which the former was one of the great founders, and perhaps the most distinguished expounder. He first turned his attention to the philosophy of the system, and soon made himself familiar with all its details. In 1827 he prepared a criticism on the views of Locke [The Mental Guide?], which Spurzheim pronounced phrenological, that is, in his view, philosophically sound.[42]

In his Reminiscences (n. 5), Capen gave us his personal recollections of his introduction to and relationship with our "prussian scientist." He wrote

> Soon after . . . [Spurzheim's] arrival I called upon . . . [him]. I was comparatively ignorant of his theories, but from what I had heard and read, I thought much of his learning and character. Some years before, I had marked out for myself a course of reading upon the history and nature of man. Metaphysics had been my early and favorite study. I had a desire to become acquainted with his philosophy. I sought him as a teacher. He was old enough to be my father, and I approached him as an humble student. I had friends of the medical profession who knew him, and who would have given me notes of introduction with pleasure. But I felt that I needed none. The truly great always welcome the honest student. When I called he received

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[40] National Cyclopaedia, n. 35, p. 377.

[41] American Biography, n. 35.

[42] Burke, p. 400.

> me politely, but he was engaged with President [Josiah] Quincy [of Harvard]. As they were engaged in general conversation, he invited me to be seated. I waited nearly an hour before President Quincy, with assurances of high consideration, took his leave. I then made known the object of my call, and freely expressed my wishes. We became immediately engaged in conversation upon subjects of mutual interest, and our first interview lasted nearly two hours. I had formed distinct views on metaphysical theories of the old schools, and had adopted for myself a method of inquiry which at once seemed to harmonize with his philosophy. He did not disguise his pleasure and satisfaction, and probably no two minds were ever more suddenly brought together in agreement and sympathy. He placed in my hand the second volume of his works, and remarked that "my first lesson must be to read his philosophy, though he advised beginners, generally, to commence with the first, which was on organology." From this time forth we were together more or less every day. He honored me with unlimited confidence in regard to his views on all subjects, his works, his plans, and his wishes. He gave me control of his business affairs, and placed in my hands from time to time all his money, and without counting. One day, when in his room, he remarked to me, "I believe I have some money in my trunk. Please take care of it." I found nearly five hundred dollars in gold on the bottom of the trunk, but I could not persuade him to count it. The receipts from his lectures were frequently handed to him tied up in a paper by his business agent, and he would pass them to me unopened with the simple remark, "Please take care of this money." When he died, all his property, papers, and money were in my hands [sic].43

As I have recounted elsewhere, it was Capen who saw to it that the skull was detached from Spurzheim's body after the

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[43]Capen, Reminiscences, pp 12-13.

latter's death and placed in the collection of the Boston Phrenological Society, a society "organized" by Capen.[44] Furthermore, Capen edited the American edition of Gall's works for which he wrote a biography of the author. Finally, he edited the Annals of Phrenology (1833-1836) which for two years served as the literary arm of the society he founded, for which assemblage he also served as secretary (see Chapter VI).[45]

In the late summer or early fall of 1832, Amariah Brigham (cf. supra) published the first edition of a work entitled Remarks on the Influence of Mental Cultivation and

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[44]Walsh, p. 199.

[45]Other publications by Capen include, for example, An Address Delivered Before the Constellation Lodge and the Associate Lodges, Assembled at Dedham, Mass., to Celebrate the Nativity of St. John the Baptist, June 24, 1829, (Boston, 1829); Biography of Zadock Pratt, of Prattsville, N.Y. To Which are Appended a Portion of His Addresses, Letters, Congressional Reports, and Speeches (n.p., 1852); Correspondence Respecting Postal Improvement, and the Removal of the Boston Post Office (Boston, 1858); The History of Democracy in the United States, by the Author of The Republic of the United States of America (Boston, 1852); The History of Democracy; or, Political Progress, Historically Illustrated From the Earliest to the Latest Periods: With Portraits of Distinguished Men (Hartford, 1874); The Indissoluble Nature of the American Union, Considered in Connection with the Assumed Right of Secession: A Letter to Hon. Peter Cooper, New York (Boston, 1862); Letter Addressed to the Hon. John Davis, Concerning the Census of 1849 [i.e., 1850] (Washington, 1849); Memorial on the Subject of International Copyright, January, 1844 [Washington, 1844, United States, 28th Congress, 1st session. House of Representatives Doc. no. 61]; and, Plain Facts and Considerations: Addressed to the People of the United States, Without Distinction of Party, in Favor of James Buchanan, of Pennsylvania, for President, and John C. Breckinridge, of Kentucky, for Vice President. By an American citizen (Boston, 1856).

and Mental Excitement upon Health (Hartford). "This was his most successful book," according to Carlson; for it went through several editions and "continued in print for over forty years."[46] This work seems to have appeared in print subsequent to Brigham's meeting with Spurzheim in Hartford but before the latter's death. For, in a footnote in that work, Brigham told his readers of Spurzheim's visit and its probable import pointing out where he felt that Spurzheim's influence would be most heartily felt. "The learned and estimable . . . [Spurzheim] is now in this country," he wrote,

> and proposes to lecture upon the interesting science of Phrenology, a science to which he has given a philosophical character, and which, by his labors, he has advanced to its present high standing. I cannot but believe that his visit to this country will be productive of great good, by directing the attention of the public to the immense importance of physical education, a branch of education, the almost entire neglect of which, in this country, threatens dangerous and lasting consequences. As to the correctness of the phrenological system, I am not qualified to determine; but so far as I have had an opportunity of observing, I think it explains the phenomena of the morbid action of the brain far better than any other.[47]

Spurzheim felt that the "mental activity" of Americans was "uncommon"--i.e., uncommonly active. He too, like Brigham, felt that in consequence of this, phrenology would be of great service to Americans particularly contributing to a reform in education. Thus, "he manifested a deep interest

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[46] Carlson, "Amariah Brigham I.," p. 832.

[47] Quoted in Annals of Phrenology 2 (December, 1835):494.

in the schools and public institutions."[48] In addition, he was

> . . . eager to know about . . . public men, their opinions upon the . . . topics of the age, their habits in life, and their methods of influence and action. He early became acquainted with [Daniel] Webster [1782-1852], [Josiah] Quincy [1772-1864], [Nathaniel] Bowditch [1773-1838], and other distinguished men of Massachusetts . . . He took a lively interest in the teachings of the clergy . . . [and] on every Sabbath . . . [he] attended two or three services at the different churches.[49]

Spurzheim's interest in the teachings of the clergy was not out of character for him. The reader will recall from Chapter III that at one time he was destined himself for that calling. In addition, his philosophy of the natural laws under which he saw mankind being guided are put forth in his writings in a clearly theological way (see Chapter III). That is, he attempts therein to keep his views consonant with "revealed religion" as he understood it (see for example, his sections on "the moral laws," "of religion in general," "of natural religion," "of revealed religion," "of Christian religion," and "of Church religion" in his Philosophical Catechism).[50] But in regard to religion in the United States Spurzheim wrote

> I do not like the system of religion in . . . America. The rich have their places in their churches, but what shall

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[48] Capen, Reminiscences, p. 13.

[49] Ibid., pp. 13-14.

[50] G. Spurzheim, Philosophical Catechism of the Natural Laws of Man, 3rd ed. (Boston, 1833), pp. 64-171.

> the poor do? There is more aristocracy than in Germany, or France. The American Churchdom is a worldly concern. Carpets, velvet, cushions, and curtains are worldly things.51

Charles Follen summarized Spurzheim's views on religion as follows:

> Whatever particular form of faith he may have preferred, he firmly believed in the essential truths of natural and revealed religion. He adopted Christianity as a divine system, chiefly on the ground of its internal evidence, its pefect adaptation to human nature, and the spirit of truth and divine philanthropy, which gives life to all its precepts . . . [Yet,] it was his opinion that the Americans were too much engaged in doctrinal controversies to allow the full effect of Christianity to appear in their lives.52

Two divines with whom Spurzheim was particularly impressed in Boston, however, were Hosea Ballou (1771-1852) and Edward Thompson Taylor (1793-1871 "the sailor preacher") --two more members of that distinguished group discussed earlier who made significant contributions to American life in its manifold aspects.

Hosea Ballou, "the founder of the denomination of Universalists," according to Thomas,[53] was born in Richmond, New Hampshire on 30 April 1771. "Destined to emancipate the Universalist movement from its Calvinistic origins, . . . his views were formed largely in independence of other men

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[51]Capen, "Biography," p. 160.

[52]Ibid., pp. 160-161.

[53]E. A. Thomas, Comprehensive Dictionary of Biography (Philadelphia, 1883), p. 63.

and books."[54] He is said to have reached his greatest eminence in Boston between the years 1818 to 1852. According to the Dictionary of American Biography, he preached three times every Sunday without notes, attracting large crowds. He edited several Universalist publications but is "best remembered" for his Treatise on the Atonement (1805).

In the company of Nahum Capen and the "Rev. Dr. [Joseph] Tuckerman [1778-1840],"[55]--who was not only an ardent admirer of Spurzheim but also felt that the latter was the only great and good man that reminded him of Jesus Christ[56]--Spurzheim attended Ballou's services in Boston. Spurzheim's evaluation of Ballou's preaching--particularly his views on the Universality of God's Love--was that it was "good phrenology." Tuckerman did not quite agree with Spurzheim on one occasion when he made such an analysis we are told, but,

> The respect in which the philosopher [Spurzheim] was held by Dr. Tuckerman was so great, deep, and sincere, he was quite disinclined to continue a[ny] conversation where there was likely to be any difference of opinion.57

Thus, Tuckerman discreetly changed the subject!

"Good old Father Taylor," as Horace Mann (1796-1859) called him, was born Edward Thompson Taylor in Richmond, Virginia, in December of 1793. At the age of seven he became

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[54] American Biography, s.v. "Hosea Ballou."

[55] American Biography, s.v. "Joseph Tuckerman."

[56] Capen, Reminiscences, p. 15.

[57] Ibid., p. 16.

a cabin boy and after ten years "came ashore" in Boston. It was here that he experienced an "old-fashioned conversion in a Methodist chapel of which the Rev. Elijah Hedding [1780-1852] . . . was in charge."[58] According to his chief biographers, "the beginning of Father Taylor's life was when he was converted. If ever a second birth was a first birth, [they continued,] it was in this instance."[59] He went to sea again in 1812 on the privateer Black Hawk, was captured and imprisoned in Britain, and there became a preacher to his fellow nautical inmates. Returning to Boston he encountered additional turmoil in his life but eventually, when the Methodists formed the "Port Society of Boston," Taylor was appointed minister of the "Seamen's Bethel" (1829) where he achieved his well-earned fame. "To listen to one of his most impressive sermons," a contemporary commented, "was like taking a voyage with him at sea."[60] He would use nautical analogies to make his points for his listeners, using "his sailor language and sea phrases to illustrate [e.g.,] the dangers of sin . . .":

> When, on the other hand, he had occasion to describe the beauty and safety of holiness, he would sketch in the language of the mariner a beautiful ship under full sail--commanded by

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[58] American Biography, s.v. "Edward Thompson Taylor," and s.v. "Elijah Hedding."

[59] G. Haven and T. Russell, Father Taylor, The Sailor Preacher (Boston, 1872), p. 20.

[60] Capen, Reminiscences, p. 17.

> a model captain and worked by a faithful crew--grandly moving onward by steady and auspicious winds to its destined port, and cheered by the unerring lights of the sun, moon, and stars.61

Taylor has been called one of the greatest preachers of his generation. Charles Dickens, Harriet Martineau, Ralph Waldo Emerson, and Walt Whitman "have all left tributes to his uniqueness and power." Father Mapple in Herman Melville's Moby Dick is ostensibly a portrayal of Taylor's manner of preaching. But more important for our narrative is that Taylor is another man who came under Spurzheim's spell. "He was a devoted admirer of Spurzheim and constantly attended his lectures . . ." The two became close friends and Spurzheim was often a guest in Taylor's home. Taylor's enthusiasm for Spurzheim was irrepressible, we are told, and, in a manner similar to Tuckerman--who, the reader may recall, viewed Spurzheim as comparable to Christ--, Taylor is said to have oftimes repeated that Spurzheim "was the only preacher . . . [he had] ever heard on earth." But Spurzheim's influence in Boston in 1832 was not restricted to the clergy--that latter group was only part of the aggregate which also included medical men, business men, lawyers, and educators, men who were considered members of Boston's "Brahmin" caste. In addition to studying the religious character of Americans, Spurzheim's Boston activities also involved professional visits to the educational

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[61] Ibid., pp. 17-18.

institutions of the area.[62]

Apart from lecturing on phrenology, which will be discussed momentarily, Spurzheim's daytime activities while in Boston involved visiting the various public institutions and returning visits to friends. Josiah Quincy, for example, invited Spurzheim to the commencement exercises at Harvard. Spurzheim attended those formalities and, in addition, attended the very special meetings of the Phi Beta Kappa Society. Other institutions with which Spurzheim became acquainted include the "Monitorial School," the "Hancock School," and the "Smith School"--all well-known at the time in Boston--the latter of which was designed particularly for the education of Blacks.

Monitorial educational methods had their origin in England around 1797. At that time an English schoolmaster by the name of Joseph Lancaster "was led . . . to a . . . discovery of the advantages of using monitors" in his teaching fortuitously since he used monitors initially being "too poor to pay for additional teachers." He soon found others who saw value in his methods, however, and eventually, through his followers, the Lancastrian Method of instruction was brought to this country. The first school was in New York City (1806), but the system soon spread "from Massachusetts to Georgia, and as far west as Cincinnati, Louisville, and Detroit." The main features of the Method were

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[62] American Biography, n. 58; Capen, Reminiscences, p. 19, and on the "Boston Brahmins," D. B. Tyack, George Ticknor and the Boston Brahmins (Cambridge, Mass., 1967).

the collection of up to one thousand students in one room, sorted and seated in rows, with "each row . . . assigned a clever boy who was known as a monitor." Each monitor commonly was responsible for about ten students. The procedure was for the teacher to first teach the monitors a lesson and then the monitors would teach the lesson to their auditors. Whether Fred S. Keller knew of this method when he developed his "personalized instructional" methods for undergraduates using "proctors, assistants and an instructor" is not known. His method--known as the "Keller Method"--however, is experiencing somewhat of a vogue today and is strangely reminiscent of the method of Joseph Lancaster, the latter of whom did not have the benefit of B. F. Skinner's remarkable theories.[63] In any event, one William Bentley Fowle (1795-1865) was the founder (in 1823) and, in 1832, the director of the "Female Monitorial School" which Spurzheim visited in Boston--a school which was Lancastrian in its approach. Also,

> This was probably the first school in the country to have scientific apparatus adequate to illustrate the subjects taught, and most of it was constructed under Fowle's supervision. In this school he introduced for the first time such subjects as vocal

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[63] E. P. Cubberly, Public Education in the United States (Boston, 1919), p. 90, and on the "Keller Method," F. S. Keller, "Good-bye teacher," in R. Ulrich, et al., eds. Control of Human Behavior: From Cure to Prevention, 2 vols. (Oakland, N. J., 1970), 2:298-309 (reprinted from J. Appl. Behav. Anal. 1 [1968]: 79-89).

> and instrumental music, calisthenics, and needlework . . . he published more than fifty [textbooks] during his life, and . . . [delivered] scientific lectures to his pupils and friends.64

Furthermore, and specifically in regard to our narrative, at the organization of the Boston Phrenological Society (see Chapter VI), Fowle was elected one of the "Counsellors." In addition, he prepared and presented a paper to that group on Spurzheim's visit to his school, from which account the following comments are in part taken.65

Spurzheim's views on education have been briefly discussed earlier (see Chapter III). While some of his detractors saw him as dogmatic and unerring in his adherence to his tenets, his supporters saw his actions as being based on a great deal of experience in observing nature, and, thus, as simply being a reflection of his "confidence" in his own correctness. "It was astonishing," Capen commented, for example,

> to see with what facility he could point out among the pupils of a[ny] school, those who were remarkable for any superiority or deficiency. His quick and penetrating eye seemed to read the very thoughts and feelings of those around him, and his remarks which immediately followed, showed his entire confidence in the truth of his science and the certainty of his decisions. He discovered no solicitude in making known his opinions, but generally expressed them without even asking whether they were right or wrong. He had been

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64 American Biography, s.v. "William Bentley Fowle."

65 Reproduced (in part) in Capen, Reminiscences, pp. 20-23.

> too strict an observer of human nature not to be acquainted with the extent and accuracy of his own discriminating powers, and his conclusions invariably proved that there was no cause for any apprehension of failure.66

One can almost envision our hero walking among the masses of students, phrenological demonstrative head in hand--like a Bishop's crosier--pronouncing on their development and, to further the analogy to a prelate, leaving a wake of awed converts at his heels. Although Spurzheim would turn over in his grave at such an analogy--he despised Christianity "disfigured by popery or by any sacerdocy who . . . declare themselves infallible," i.e., Catholicism as he viewed it[67]--, the following account by Fowle of Spurzheim's visit to his school suggests the analogy above and supports Capen's earlier comments:

> Soon after the commencement of Dr. Spurzheim's lectures in Boston, understanding that some peculiarities of my school had led him to express a wish to visit it, I requested a gentleman to invite him to visit the school whenever he pleased. He came October 3d [1832], accompanied by the gentleman before mentioned. It had been previously hinted to the pupils that Dr. S. would visit the school, and they having imbibed the notion that he could see farther than their teacher, were by no means at ease, when a very tall, stout man, with an exterior rather commanding to children, was introduced. The first impression upon the minds of the pupils was unfavorable to their ease, but the countenance of the Doctor, which expressed the delight he felt at the sight of so many

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[66] Ibid.

[67] G. Spurzheim, A View of the Elementary Principles of Education, Founded on the Study of the Nature of Man, 5th ed. (Boston, 1836), p. 250.

interesting subjects for the exercise of his skill, soon removed all apprehension.

The children were engaged at their desks in a variety of exercises, and I requested him to walk freely among them, remarking that he probably did not wish to see any exhibition of their acquirements. This I said, because I wished him, if he gave any opinions, to do it while unacquainted with the points of excellence which would naturally be developed by any exhibition.

I had just corrected some pieces of composition, and I remarked to him that one short piece seemed to have such a phrenological bearing, that it might amuse him. He read it, and said he should like to see the child that wrote it. I told him where she sat, and we purposely walked in that direction. Before we reached her, 'Ah,' said he, '<u>Caution</u>.' 'Ask her,' said he, 'whether she ever heard any discussions upon the points touched in her theme?' I asked the question, and she, blushing deeply, replied, that she never had heard any one speak on the subject. "Well, my dear, you have not given your own opinion; to which side of the question do you incline?' She hesitated, and he turned to me and said, '<u>Caution</u> will take time to consider.' She then gave her opinion with great modesty, and it happened to favor his view of the subject. 'A fine head,' said he to me, 'a fine head. What Conscientiousness! and then what Firmness! A fine model of what a female head should be.' . . . With a perfect knowledge of her character, having had her under my care for seven years, I could not have described her peculiar excellences as readily as he did.

As we turned to proceed back to my desk, he laid his hand upon the head of a little girl about five years old. 'Fun, fun,' said he, and laughed, 'Courage too,' said he, 'look out for pranks.' The child had only been my pupil three or four days, but she had already exhibited symptoms of insubordination. A few months' more experience proved her playful to excess, and so courageous in the pursuit of fun, that she disregarded the restraints I usually impose upon insubordination and inattention . . .

I next called up a little girl, whom he pronounced quick at figures. She is the quickest I have ever seen in the elements of arithmetic. I then called up the head and foot of a class formed of three or four classes that I had been reviewing, and asked him which was the best

> arithmetician. He instantly pointed her out, but said, 'the other was not deficient.'
>
> By this time the curiosity of the pupils was so much excited, that regular work was interrupted. Children that had been called, remained standing around the Doctor, and in a short time others joined them, and he had an audience of twenty or thirty. He was a decided favorite. At this moment, a few of the larger pupils brought forward a Miss about thirteen years old, who had, as they thought, a very small head, and respectfully requested Dr. S. to tell what her head was good for. He turned to me and said, 'Imitation, oh, how full!' I asked him how it would be likely to show itself. 'In mimicry,' said he, 'as likely as in any way. Is she not a great mimic?' I had never suspected her of any such disposition, and turning to her companions, I asked them if they had ever seen her attempt to mimic any one. 'Oh, sir.' said they, 'she is the greatest mimic you ever saw. She takes everybody off.' This was news to me. 'You may rely upon it,' said Dr. S., 'she will be taking me and my foreign accent off, before I leave the room' This proved to be a true prediction. Before he left, she was seen to be manipulating the heads of her companions, in his peculiar way.
>
> His visit lasted only two hours, and he left the school much to the regret of the pupils, to whom his easy manners, benevolent advice, and knowledge of their thoughts, had strongly recommended him. Next day, they requested me to beg him to honor them with another visit. He promised to do so, but his engagements prevented him.[68]

Not a great deal is known about Spurzheim's other visits to public institutions. At the Hancock School, however, he met the principal Barnum Field. Field was, unlike Fowle, in favor of corporal punishment in education and, was also a participant in the "common school controversy" in Boston which he fought for the maintenance of the status quo

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[68]Fowle quoted in Capen, Reminiscences, pp. 20-23.

against such men as Samuel Gridley Howe and Horace Mann.[69] Field commented that Spurzheim's "examination of . . . [his student's] intellectual progress, though perfectly simple, was more appropriate and interesting," he contended, "than anything of the kind . . . [he] had ever witnessed."[70] In regard to Spurzheim's remarks on the Black children in "The Smith School," it might only be mentioned that his adherence to the idea of the inferiority of the Black race in respect to the "reflective faculties"--i.e., his view of the Negro, ceteris paribus, as being of an inferior race--was "supported" by his visit there. This idea was not peculiar to Spurzheim, however, for, it was a generally held belief in 1832 which only found "support" through phrenology. In addition, Spurzheim felt that the indiscriminate admittance by the legislators of America of any and all nationalities came to their shores would certainly spell disaster for the country. He believed that

> If they admit the races of men indistinctly, what they never do with animals, the country will and must experience more trouble than commonly is thought of. The slave dealers know that one race of negroes [sic] is preferable to another, and why should it not be the same with the white. The evil will not be remedied in educating the children and in establishing poor-houses for the heedless adults. The number of troublesome citizens will rather increase by such means.71

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[69] See on this L. E. Richards, ed. Letters and Journals of Samuel Gridley Howe, 2 vols. (Boston, 1909) 2:passim and H. Schwartz, Samuel Gridley Howe Social Reformer: 1801-1876 (Cambridge, Mass., 1956), pp. 120-136.

[70] Capen, Reminiscences, p. 24.

[71] Spurzheim, A View of . . . Education, pp. 238-239.

Regarding "troublesome citizens" particularly, however, Spurzheim felt that those at the Massachusetts State Prison had "heads . . . [which were] unusually good,' when compared to prisoners in similar institutions." He explained this on the ground that their offenses were due for the most part to intemperance, and were, thus, "influenced by other than natural causes"--i.e., other than physical (hereditary) causes.[72] But, in general, Spurzheim felt that "troublesome citizens" such as "madmen" were not accountable for their crimes, nor were those accountable who were wanting in "moral liberty" in general, e.g., infants. He did support the death penalty, however, as a means of "delivering society from villains."[73]

Before leaving this section of Spurzheim's travels during the fall of 1832, it is necessary to mention one additional personage with whom he became acquainted, a person who achieved fame not only in the history of education, but in the history of medicine as well. That man was Samuel Gridley Howe. While Howe and the others who have thus far been treated represent only a sample of the many lives who interacted with Spurzheim during his stay, it is a sufficient sample, I believe, to depict the fact that his treatment in Boston was unusual. Capen made some general remarks on this point when he recalled that Fall of 1832 forty-nine

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[72]Capen, Reminiscences, pp. 23-24.

[73]Spurzheim, A View of . . . Education, pp. 290 & passim.

years later:

> It is an interesting fact to be noted, and particularly to be remembered, that no stranger from abroad, however distinguished by public service or by attainments in science, was ever received in the United States with more profound respect and enthusiastic attention than Dr. Spurzheim. It was clearly evident that his high reputation had preceded him, and it was more than sustained by his wisdom and presence . . . No witness of his eloquence, of his truthful appeals, and of his ample knowledge had ever a desire to venture an open opposition to his teachings . . . All admired, no one doubted . . . "Truth from his lips prevail'd with double sway;/ And fools, who came to scoff, remain'd to pray" [Goldsmith].'74

While the truthfulness of these remarks may have been somewhat colored by Capen's enthusiasm--i.e., a bit overexaggerated--there were others who felt similarly. Samuel Gridley Howe was one of those who "remained," if not to "pray," at least to inquire.

Samuel Gridley Howe, "champion of peoples and persons laboring under disability", was educated at Brown University where he graduated in 1821 "being more noted [, so we are told,] for pranks and penalties than for scholarship." Three years later, he received his M. D. degree from Harvard. He was immediately allured by "the romantic appeal of Greece, then battling against the Turk" and spent six years abroad assisting them in their struggle. In 1829 Massachusetts voted to incorporate a school for the blind. In 1831 Howe was retained to run that school; and, after a brief excursion

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[74]Capen, Reminiscences, pp. 115-116.

to Europe to inspect similar institutions there, he started the school in Boston in August 1832--the month of Spurzheim's arrival--in his father's home. This school today is the beautiful and world-renowned Perkins Institution.[75] There, Howe educated Laura Dewey Bridgman (1829-1889), the poor creature almost bereft of all her senses but that of touch. It was at Perkins also that the mind of Helen Keller (1880-1968), in a similar way, was freed from the constraints of silent-darkness and brought into communication with the world. In addition to this, Howe established in 1848 "the first publicly supported school for the instruction of idiotic and feeble-minded youth in the United States."[76]

During Spurzheim's tour in Boston Samuel Gridley Howe became one of his many confidants. At that early period, as noted above, the Perkins School was just beginning. Since it was in its formative period, and since Howe himself, as its director, was in a sense groping for a new and better approach to the handling of the education of blind youth, he was open-minded enough to attend to Spurzheim's views. He found in them an answer to his quest, and adopted phrenology--if not totally--at least in principle and applied

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[75] American Biography, s.v. "Samuel Gridley Howe."

[76] American Biography, s.v. "Laura Dewey Bridgman;" I. Ross, Journey Into Light (New York, 1951), pp. 157-161; M. Howe and F. H. Hall, Laura Bridgman: Dr. Howe's Famous Pupil and What He Taught Her (Boston, 1903); M. S. Lamson, Life and Education of Laura Dewey Bridgman the Deaf, Dumb, and Blind Girl (Boston, 1881); Capen, Reminiscences, p. 154; and, Schwartz, pp. 142-143.

its tenets in the education of his charges. Not only was he a member of the illustrious committee in charge of Spurzheim's funeral (see others in n. 2), but he also became the Corresponding Secretary of the Boston Phrenological Society, was at one time its President, lectured frequently at its meetings, and was a steadfast supporter of the group even after it dissolved (see Chapter VI). Unfortunately, the two-volume Letters and Journals of Samuel Gridley Howe of over one thousand pages, edited by his daughter Laura E. Richards (Boston, 1909), does not include the correspondence related to that organization, it having been either protectively omitted, or lost. There is reference in that compilation, however, to Howe's respect for the phrenologist George Combe, with whom Howe developed a lasting friendship.[77] But in 1832, "guided by the light of Spurzheim, . . . [Howe's] first glimpse of the great truths of . . . [Spurzheim's] system gave him irrepressible joy . . .";

> They opened to him a new world of mental order and activity such as he had never imagined or realized. He first began to see man in his relations of power and duty, and to comprehend the value of self-knowledge in the cause of education . . . He not only gave to the blind the full advantage of the new philosophy [phrenology], but he sought out new subjects [i.e., new students], subjects to whom unfortunately had been denied most of the inlets of knowledge . . . [In the education of] Laura Bridgman . . . by the aid of Phrenology, [for example, Howe was able to find] the key to unlock . . . [her] imprisoned mind . . . 78

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[77] 2:145-146.

[78] Capen, Reminiscences, p. 154.

Seven years after Spurzheim's visit, on about 2 December 1839, Howe stated his continued indebtedness succinctly:

> Before I knew phrenology, [he then wrote], I was groping my way in the dark as blind as my pupils; I derived very little satisfaction from my labors, and fear that I gave but little to others. Our upper classes [at Perkins] are all instructed in the general principles of intellectual philosophy, and we explain to them both the old and the new systems; but I never knew one of them who did not prefer the latter [phrenology], while I have known many who have taken a deep interest in the philosophy of Phrenology, and heard them avow that they were made happier and better by understanding its principles. Some of our teachers [at Perkins] are persons of considerable intellectual attainments, and all of them have adopted the new philosophy since they joined the institution . . . because their duties led them to examine all the theories of mental philosophy, and the new system recommended itself most forcibly to their understandings, and appeared most susceptible of practical application.79

Howe's respect for and belief in phrenology continued beyond 1839 and he later became George Combe's "leading American interpreter." In that capacity, he had an outline of phrenology and Combe's The Constitution of Man (see Chapter IV) prepared in special raised type editions for the blind--the latter of which was a large quarto volume of over two hundred pages and about five inches thick. Howe considered this edition of Combe's work to be "the most valuable addition ever yet made to the library of the blind in any language." That remark, it should be noted, was written in

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79Howe quoted in G. Combe, Notes on the United States of North America During a Phrenological Visit in 1838-9-40, 2 vols. (Philadelphia, 1841) 2:204-205.

1858, twenty-six years after Howe's conversion by Spurzheim in 1832. The interested reader might wish to peruse Howe's On the Causes of Idiocy, which has recently been reprinted (New York, 1972 [1848])--in the Medicine & Society in America series of the Arno Press. In that document one will find much that is phrenological, albeit guarded in its presentation. In the following chapter we will have occasion to hear of Howe again in regard to his activities in the society of phrenologists at Boston.[80]

While the list of scholars who were directly or indirectly influenced by Spurzheim, his lectures, and his theories in 1832 seems to this writer to be endless, the seeming endlessness is more probably antifactual--i.e., it only appears to be without end. It must end somewhere, however, but this writer's impression is that phrenology in America in all its ramifications is traceable to this eventful Boston autumn. Furthermore, Davies has shown that reforms in education, penology, mental health, and so on were remarkably dependent on phrenological theory--theory which was expounded most clearly and given greater impetous in the United States by the electrifying presence of Spurzheim himself in 1832. Stern, in addition, gives a very readable

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[80] H. Schwartz, "Samuel Gridley Howe as Phrenologist," Amer. Hist. Rev. 57 (1952):644-651; J. D. Davies, Phrenology Fad and Science: A 19th Century American Crusade (Hamden, Conn., 1971), p. 86, and C. Gibbon, The Life of George Combe, 2 vols. (London, 1878) 2:358.

account of the involvement of the Fowler family in phrenology's American history--a separate history which began in Amherst, Mass. with Henry Ward Beecher (1813-1887) and Orson Squire Fowler (1809-1887) also in 1832.[81] Among the additional figures who were embraced by the scope of Spurzheim's influence--men who were among "the brightest geniuses of the age," according to Samuel Gridley Howe[82]--are those who also made "significant contributions to American life in its manifold aspects," and were, thus included in the Dictionary of American Biography (n. 1). A sampling of those not previously mentioned in this connection includes:

Josiah Foster Flagg (1788-1853, 6:450);

Henry T. Tuckerman (1813-1871, 19:45);

Rev. Henry Ware, Jr. (1794-1843, 19:448-449);

John Pickering (1777-1846, 14:564-565);

Hon. Abbot Lawrence (1792-1855, 11:44-46);

Samuel Downer (1807-1881, 5:415);

Samuel B. Woodward (1787-1850, 20:511);

Jonas Chickering (1798-1853, 4:65);

William A. Alcott (1798-1859, 1:142-143);

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[81] Ibid., and M. B. Stern, Heads and Headlines: The Phrenological Fowlers (Norman, Oklahoma, 1971), reviewed by this writer in J. Hist. Behav. Sci. 8 (1972):439-441; American Biography, s.v. "Henry Ward Beecher," and s.v. "Orson Squire Fowler."

[82] In Capen, Reminiscences, p. 122.

Benjamin Silliman (1779-1864, 17:160-163);

Horace Mann (1796-1859, 12:240-243);

John Pierpont (1785-1866, 14:586-587);

William Sturgis (1782-1863, 18:183-184);

Nathaniel B. Shurtleff (1810-1874, 17:141-142);

Thomas Wren Ward (1786-1858, 79:441-442);

Nelson Sizer (1812-1897, 17:193-194);

Alvan Fisher (1792-1863, 6:404-404);

George Bancroft (1800-1891, 1:564-570); and,

George Ticknor (1791-1871, 18:525-528).

I will not burden the reader with an account of the accomplishments of the above mentioned notables. Suffice it to say, their contributions were varied; and, although Spurzheim and/or Spurzheimian phrenology touched all of their lives at one point or another, it would be unfair to call them all "phrenologists" per se. Many were members of the Boston Phrenological Society, others made more unique contributions to our narrative, all accepted the philosophical bearings of phrenology, and some are discussed in my previous writings in those capacities.[83] But in addition to being highly influential on a personal level, Spurzheim's

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[83]See, e.g., Walsh, n. 2, and A. A. Walsh, "George Combe: A Portrait of a Heretofore Generally Unknown Behaviorist," J. Hist. Behav. Sci. 7 (1971):269-278, and A. A. Walsh, "Is Phrenology Foolish? A Rejoinder," J. Hist. Behav. Sci. 6 (1970):358-361. Also see D. Bakan, "The Influence of Phrenology on American Psychology," J. Hist. Behav. Sci. 2 (1966):200-220, and Davies and Stern, passim.

influence in Boston was even more broadcast as a result of his public lectures. Furthermore, in another and very real sense, his influence was even more widespread and lasting after his untimely demise. It was suggested in Chapter III that Spurzheim seemed obsessed with the idea that he needed to spread the truth about phrenology--he was referred to there as being seemingly a "driven man." This attitude was even more apparent in his Boston tour; for, in addition to the daily social and professional visits he required of himself, he gave formal public lectures. It was as a result of this tumultuous schedule in part that he died. Furthermore, his "evangelical" obsessive attitude, if this is a correct view of him, most certainly, it seems to this writer, would have prompted his auditors--if not to become immediate believers--at least to inquire into the truthfulness of what he said. But I anticipate. We must close this chapter with an account of his Boston lectures in 1832 and conclude thereafter with the events surrounding his unfortunate death.

Spurzheim's Lectures and Fateful Last Days in Boston

On 19 August 1830, the "American Institute of Instruction" was founded in the Massachusetts State House, Boston. Presiding as first President of that group was Francis Wayland (1796-1865) President of Brown University--"author of a most popular text in 'moral and Political Science,'" and, in 1854, the author of The Elements of Intellectual Philosophy, the latter of which has been "laconically" characterized as "'plutôt un bon text-book qu'une théorie originale,' and there is nothing more to be said." More importantly, we are told, his views anticipated some later works in educational psychology.[84] In any case, the American Institute is considered to be the mother of all modern educational associations--i.e., associations of educators--and Wayland is notable as its first leader.[85] But, "great men stood forth with more grandeur in those days," Winship has written, and

> This association furnished the forum for great exploitation of schemes [,e.g.,]

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[84] Fay, pp. 125-126, and American Biography, s.v. "Francis Wayland."

[85] A. E. Winship, "The American Institute of Instruction," National Education Association, Fiftieth Anniversary Volume, 1857-1906, pp. 457-461--reprinted in part in E. W. Knight and C. L. Hall, eds., Readings in American Educational History (New York, 1951), pp. 409-412.

> for public care of the insane and feeble-minded, and public education of the deaf and blind.[86]

"Here," furthermore, Winship continued, "William B. Fowler exploited phrenology for years [i.e., probably William B. Fowle, see supra]" and "Dio Lewis, physical culture."[87] The most frequent in attendance at this great assemblage were some of the people who have been previously mentioned in this chapter,--e.g., Horace Mann, Samuel Gridley Howe, Thomas Hopkins Gallaudet, and John Pierpont--and others of similar notability, e.g., Theodore Parker (1810-1860), Samuel J. May (1797-1871), Henry Barnard (1811-1900), Ralph Waldo Emerson (1803-1882), Asa Gray (1810-1888), Benjamin Greenleaf (1786-1864), James G. Carter (1705-1849), A. Bronson Alcott (1799-1888), and Elizabeth P. Peabody (1804-1894) to name a few.[88] The American Institute, furthermore, was responsible for giving Horace Mann to the educational leadership of America. In regard to our narrative, however, it was in front of this organization that Johann Christoph Spurzheim began his American campaign.

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[86]Ibid., p. 410.

[87]Ibid., q.v. D. Lewis, The New Gymnastics -- With a Translation of Prof. Kloss's Dumbell Instructor and Prof. Schreber's Pangymnastikon (Boston, 1862).

[88]All in American Biography s.v. "Theodore Parker" (14:238-241); s.v. "Samuel J. May" (12:447-448); s.v. "Henry Barnard" (1:621-625); s.v. "Ralph Waldo Emerson" (6:132-141); s.v. "Asa Gray" (7:511-514); s.v. "Benjamin Greenleaf" (7:581-582); s.v. "James G. Carter" (3:538); s.v. "A. Bronson Alcott" (1:139-141); and s.v. "Elizabeth P. Peabody" (14:335-336). See Winship for others.

Late in August or early in September of 1832 Spurzheim made his first appearance before a Boston audience before the American Institute of Instruction in the Representative's Hall of the State House. He was apparently invited by that great assemblage--perhaps by Howe, Mann, Gallaudet or Pierpont--to present his views on education. "When it was known that he was to speak," Capen recalled,

> there was a general interest excited, and all had a desire to see and hear him, and the occasion brought together a large and most respectable audience of ladies and gentlemen. He delivered his lecture without notes (as he always did), and was listened to with profound attention. The audience seemed to be perfectly delighted . . . [one] heard nothing but remarks of commendation.[89]

There were, no doubt, people in attendance at this first lecture who already knew of Spurzheim and his views. But there were also others, equally without doubt, who heard him for the first time. If the audience really were "perfectly delighted," one can well imagine that this first exposure was to them but a "taste of honey," and when the full course of lectures was finally scheduled, all would clamour to attend.

Shortly after the lectures at the American Institute, on Tuesday evening, 11 September 1832, the following notice appeared in a Boston paper:

> Phrenology. Dr. Spurzheim, will deliver a course of 18 lectures on phrenology, at the Lecture Room of the Atheneum, Pearl street, on Monday's Wednesday's and Friday's, at half

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[89]Capen, Reminiscences, p. 25, and Capen, "Biography," p. 107.

> past seven o'clock in the Evening, to commence on Monday, the 17th inst. ["instant," i.e., of the current month]
>
> Tickets of Admission $6 each, to be had at Marsh, Capen & Lyon's Bookstore, No. 133 Washington Street and at the entrance. Admission to a single lecture 50 cents. W S & M sept 11 [sic].[90]

The Athenaeum was a natural location for these events. Not only was it near Spurzheim's permanent residence at Mrs. LeKain's on Pearl Street, but it was the leading arm--i.e., the main literary resource center and main point of assembly--of the Boston literati of the period. In 1832, Thomas W. Ward, Nathaniel Bowditch and Edward Wigglesworth are listed among the trustees[91]--both Wigglesworth and Ward were eventually involved in the handling of Spurzheim's estate.[92] The Athenaeum, which had been incorporated in 1807, included among its founders Joseph Tuckerman and John Collins Warren, and, among its trustees at various times such people as Daniel Webster and Oliver Wendell Holmes, all cited earlier. The advertisement for Spurzheim's lectures was repeated on September 12th, 16th and 17th in the Daily Transcript (n. 90). But before the public lectures at the Athenaeum began, Spurzheim gave his first lecture on cerebral anatomy at the Medical College, i.e., at Harvard

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[90] Boston Daily Evening Transcript, 11 September 1832.

[91] J. Quincy, The History of the Boston Athenaeum, With Biographic Notices of its Deceased Founders (Cambridge, Mass., 1851), p. 132.

[92] Walsh, "The American Tour," p. 203.

(Mason Street, Boston), on Friday afternoon, September 14th.[93]

The first series of lectures at the Athenaeum commenced on schedule the following Monday. Shortly thereafter he began another series in Cambridge--occupying, probably, Tuesday, Thursday and Saturday evenings. As was noted in the announcement quoted above (11 September), the public course involved eighteen lectures. The anatomical course, given on every other day "before the Medical Faculty and other professional gentlemen of Boston" was a five part series.[94] Thus, Spurzheim was lecturing six evenings a week--three at the Athenaeum and three in Cambridge--and delivering lectures on cerebral anatomy. The Boston lectures were generally an hour and a half--those in Cambridge, two hours. To add to this (and to understate and to say the least) busy schedule, Capen informs us that Spurzheim would normally attend social engagements in the evenings after his lectures. Furthermore, as was pointed out earlier in the Chapter, much of his time was spent visiting public institutions during the day, and, since

> his time and presence were in constant demand, there was hardly an hour in the day, after 9'o'clock A.M., during which he was not engaged either in receiving company or making visits . . . [The little] time he had before breakfast was given to the preparation of new editions of his works for

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[93] Boston Daily Evening Transcript, 13 September 1832.

[94] Capen, "Biography," p. 107.

the press.[95]

From the reports of contemporaries, we discover that the lectures in Boston, Cambridge, and before the physicians of the area were very successful. Their content seems to represent a definitive coverage of the "science" as it was then understood and need not concern us here (a complete list of the topics covered is reproduced in Walsh).[96] Suffice it to say, the series was probably a packaged one in part-although delivered extemporaneously--insofar as it was probably a standard presentation which he also had delivered to British audiences. While his lectures were in progress, the Boston Medical and Surgical Journal took notice of them and informed their[97] readers that his course would probably be repeated in the winter months in Boston, and also given in Salem. They then offered the following evaluation:

> Dr. Spurzheim's Lectures on Phrenology continue to attract crowded and delighted audiences. The facility, spirit and clearness with which this able physiologist illustrates his favorite science, give an interest to his lectures that few men can infuse into exercises of this description. Most, if not all his auditors rise with reluctance after listening an hour and a half to his extemporaneous instructions. Among the constant attendants on this course, are our most

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[95] Capen, Reminiscences, pp. 26-27.

[96] Walsh, "The American Tour", p. 191 (and "n. 26").

[97] "their" here refers to the editorial board, a "club" of sorts, which reviewed papers submitted to them, see Viets, A Brief History, p. 126.

> distinguished physicians, lawyers and divines, and citizens best known for their scientific and literary attainments; and although we cannot say how many of these are convinced of the correctness of Dr. Spurzheim's peculiar [i.e., unusual] science, most are persuaded that there is more truth in it than they had before suspected, and none can fail to be forcibly and favorably impressed with his ideas of education and of intellectual philosophy. For ourselves, we believe that the efforts of Dr. S. will form among us a new era in education, and open, to the minds of the most intelligent, new and correct views of their moral and intellectual powers, and the best means of cultivating them all, in the most rational and successful manner.[98]

Indication that all was going well may be gathered from a number of indicators. One such indicator was that on 24 September 1832--one week after Spurzheim had commenced lecturing--a number of Boston publishers placed advertisements in local papers announcing the availability of Spurzheim's phrenological works. The demand for them was ostensibly increasing. William Hyde & Company of Portland Maine and Allen & Ticknor, conjointly advertised the availability of Spurzheim's Outlines of Phrenology which they stated was published on that date. They also announced that a few of the marked busts were for sale, i.e., the demonstrative busts which have become symbolic of all phrenology.[99] The Outlines was published by Marsh, Capen & Lyon, but it was apparently distributed by other bookstore-publishers. On the 25th of September (Tuesday) Nahum Capen

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[98]"Lectures on phrenology," Bost. Med. Surg. J. 7 (1832):162.

[99]Tebbel, pp. 391, 453-454; and Boston Daily Evening Transcript, 24 September 1832.

announced in the Daily Transcript that his firm would be publishing Spurzheim's other works shortly. But, in any case, the Monday-Wednesday-Friday lecture schedule proceeded without problems--the seventh lecture on the "Moral and religious feelings,"[100] was announced in the Saturday Daily Transcript (29 September 1832) for the following Monday. Furthermore, the number of auditors continued to increase at every lecture, and, in addition, invitations from other cities in this country began to arrive--the one from Philadelphia being extended to Spurzheim by John James Audubon personally. But this happy optimistic state of affairs was not to be long-lived.[101]

Capen has observed that although Spurzheim had a naturally strong constitution, his exertions in support of his favorite philosophy were greater than he could endure.[102] This point may not be totally correct, however, for, the reader will recall that Spurzheim was subject to motion sickness, i.e., sea-sickness. While that fact alone would not preclude strength of constitution in other respects, it does at least suggest a constitutional predisposition to a form of upset not generally experienced by most individuals. One must also remember that Spurzheim was approaching his fifty-sixth birthday (31 December 1832) which was a less

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[100] Walsh, (n. 96).

[101] Follen, Funeral Oration, p. 26, and Walsh, "The American Tour," p. 192.

[102] Capen, Reminiscences, p. 27.

probable age to reach in 1832, actuarily speaking, then it is today. In the early weeks of October, he began to experience the effects of his lack of moderation and restraint as regards his social and public lecturing schedule. At that time, he attributed his occasional and intermittent malaise to his change of diet--or, as he is said to have stated "the natural laws have been violated, and I must suffer the penalty; I must live simple and nature will correct the evil."[103] "He presumed upon his powerful constitution before he became accustomed to our climate," his friend Capen noted, and

> I frequently found him writing in his room at an open window early in cool October mornings. Invariably when I entered he would close the sash. When asked the reason for so doing, he kindly remarked, "Oh, I can stand what you can not." No man had more confidence in the strength of his constitution and in the internal corrective power of nature than Spurzheim. He had become so familiar with the natural laws of man, that he almost fancied they were under his control. In answer to compliments regarding his health, we have heard him reply, with a confident smile, "I am well, I thank you; I am always well." [sic][104]

But Spurzheim neither had "control" of the natural laws nor was he "always well." Toward the end of October his general malaise became more severe and attacks of indisposition occurred more frequently. On the evening of October 17th--during "the beautiful lecture on charity and mutual forbearance" (Lecture No. XIV)--"when he was diffusing light

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[103] Ibid.

[104] Ibid.

and warmth to his hearers, he was seen suddenly shivering."[105] Lecture No. XV was given on schedule (Friday 19 October) and he had the week-end ostensibly to recover or at least to rest. He probably did neither, however, for, on Monday 22 October, when leaving his lecture on "The natural language" (Lecture No. XVI) he was heard to remark "I feel quite ill, and I am afraid my own natural language has been too strong for the pleasure of my hearers."[106] On Tuesday October 23rd the Daily Transcript announced that

> Dr. Spurzheim will deliver the last two lectures of his course on WEDNESDAY and FRIDAY EVENINGS, at half past 7 o'clock, at the lower Hall of the Masonic Temple. Subject: Education . . .

The Masonic Temple, which had just been completed in 1832, housed in its upper stories a well-known school run by A. Bronson Alcott (cf. supra).[107] Spurzheim's lectures had been moved there to accommodate the larger audiences. He was determined to give those last two lectures.

> The arrangement has been made [he stated,] the public will expect to hear me at the stated time, and when I have finished, it will be a relief to know that I can rest without disappointing others.[108]

But there is some confusion regarding the events for the remainder of this week, and I have discussed this elsewhere.[109]

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[105] Follen, Funeral Oration, p. 26.

[106] Capen, Reminiscences, p. 28.

[107] Drake, pp. 312-313.

[108] In Capen, Reminiscences, p. 28.

[109] Walsh, "The American Tour," p. 192.

The eighteenth lecture of one course--the Boston course--was apparently given as planned on Friday 26 October. That lecture was announced for the Athenaeum although it seems to have been given in the Masonic Temple.[110] For some reason, Capen suggests that Spurzheim was to lecture in the Temple again Saturday evening 27 October. Since we do know that his Cambridge lectures were not completed, and possibly at the suggestion of his friends, he might have thought it wise to refrain from traveling to Cambridge to lecture and may have moved his Cambridge class to Boston to be completed--combining the two classes for lecture No. 18, and giving the Cambridge auditors what they missed the following night. There was some uncertainty regarding the Temple's availability on Saturday 27 October and at the close of the lectures the previous evening Spurzheim inquired of his auditors, "'In what place shall we meet next time?' . . . There was no human voice," Follen wrote, "that could rightly answer this question."[111] Spurzheim returned to his lodgings at Mrs. LeKain's Friday evening October 26th never to leave them again.

During the next three days (27-29 October) Spurzheim showed no signs of improvement. During that period he insisted on handling his illness personally, i.e., he would

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[110]cf. Capen, Reminiscences, p. 28 with Follen, Funeral Oration, p. 26, with Walsh, "The American Tour," p. 192, with the Boston Daily Evening Transcript, 26 October 1832.

[111]Follen, Ibid., p. 26, and Walsh, Ibid., p. 193.

not allow another physician to prescribe for him. One might speculate at this point that Spurzheim had little faith in the general practice of medicine, for, earlier in this Chapter I quoted from a letter he received in Boston wherein this idea was suggested. In that letter, from a Parisian friend, there was a remark that since he, Spurzheim, rendered himself so useful to the poor emigrants on board ship during his passage here, he ought to have been therefore reconciled to medical science--suggesting that he did lack faith in the general practice of medicine. This would also explain, perhaps, why he chose not to be a general practitioner himself. He "reluctantly" accepted some medical advice, however, but it was not until Tuesday, October 30th, that he allowed Dr. James Jackson to attend him (Jackson was one of the editors at that time of the Boston Medical and Surgical Journal [112]). Spurzheim had apparently only postponed his last lecture from Saturday (27 October) to Tuesday (30 October). On Tuesday evening the Daily Transcript announced that it would be postponed again--no date was established. On Monday evening, however 29 October 1832, and no doubt to the chagrin of the Spurzheimians in Boston, it was announced in the Daily Transcript that Dr. G. Bradford would deliver a lecture on phrenology at the Athenaeum that evening. Bradford, whomever he was, probably annoyed those who may have seen him as taking advantage, opportunistically, of Spurzheim's

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[112] Viets, A Brief History, p. 126.

indisposition. Bradford's second lecture--to add insult to injury--was announced for November 5th, the following Monday.[113] In any case, Spurzheim's illness continued and it became increasingly apparent that he was not improving. In the Daily Transcript for Saturday 10 November the following notice appeared:

> We regret to learn that Dr. Spurzheim's indisposition is of so serious a nature that his physicians entertain no hope of his recovery.

Probably but a few hours after that paper was distributed throughout Boston, at 11:00 P.M., Spurzheim expired.

The details of the events subsequent to Spurzheim's death I have treated elsewhere.[114] To summarize, immediately following his death, on Sunday morning the notable group alluded to in the beginning of this Chapter (see n. 2) assembled to make the funeral arrangements. The arrangements were made in a very solemn manner, as one can gather for, Charles Follen recorded and published them for posterity. The funeral was held November 17th with the body being transported in a procession from the Medical College--where John Collins Warren had previously made a public examination of it--accompanied by the members of the Boston Medical Association. What a sad moment that must have been! Nearly three thousand people are said to have attended those solemnities, and his decease is said to have cast a gloom over the city

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[113] Boston Daily Evening Transcript, 1 November 1832.

[114] Walsh, "The American Tour."

not to be described by language.

On 14 September 1831, the "public religious consecration" of Mount Auburn Cemetery in Cambridge, Mass. had taken place.[115] Mount Auburn, "the first nonsectarian garden cemetery . . . in the English speaking world" was patterned--on a larger scale--after Pére Lachaise in Paris, the first modern garden cemetery.[116] It was in the Pére Lachaise that Franz Joseph Gall had been buried in 1828--the memorial bust of whom may still be seen over his grave in a tree-shaded (albeit crowded) grove there. In 1832 Hannah Adams, the historian, became Mount Auburn's first tenant. Johann Christoph Spurzheim has the distinction, although a dubious one, of being the second. Furthermore, William Sturgis, in

> respect for the memory of . . . [Spurzheim], whose clear, comprehensive, and elevated view of the nature of man marked him as the sound philosopher; and whose unwearied efforts to promote human happiness, by physical, intellectual, and moral culture, placed him in the foremost rank of the philanthropists of his age

paid $1000.00 to erect an Italian marble monument which still remains at Spurzheim's grave.[117] But on that sad day when Spurzheim's Boston friends viewed solemnly the deposit of

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[115] J. Bigelow, A History of Mount Auburn Cemetery (Boston, 1860), p. 11.

[116] F. W. Russell, Mount Auburn Biographies (Cambridge, Mass., 1953), p. xvii.

[117] C. G. Loring, "Memoir of Hon. William Sturgis," in Proc. of Mass. Hist. Soc., 1863-1864 (Boston, 1864), pp. 420-473.

his remains in Mount Auburn, they probably did not realize that in years to come, many of them who were united with Spurzheim during life, would rest with him in death within the embrace of Mount Auburn's hallowed walls. We discover in the listing of famous figures buried there, for example, those of Samuel Gridley Howe, Nathaniel B. Shurtleff (see n. 125), Nathaniel Bowditch, William Ellery Channing, Josiah Quincy, John Pierpont, Joseph Tuckerman, Hosea Balou, Joseph Story, Edward Wigglesworth, William Sturgis, Winslow Lewis, and Thomas W. Ward to name a few.

Spurzheim's memory remained for many years in the hearts of Bostonians. The immediate effect of his visit is to be the subject of the next chapter. To illustrate that his memory lived long at this point, however, we might consider the comments made by Loring in 1864, who wrote then that Spurzheim's Boston tour and his lectures there in 1832

> . . . gave an impulse to thought upon mental, moral, and physical development. --the fruits of which have been ever since abundantly apparent in our pulpits, lecture-rooms, and schools . . . [Italics mine].[118]

Spurzheim's monument in Mount Auburn remained a public attraction as late as 1875 and was discussed in tourist guides of the period along with, e.g., the statues of Nathaniel Bowditch--which was the first full-length bronze figure cast in the United States--, Joseph Story, and Hosea Ballou.[119]

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[118] Ibid., p. 463.

[119] Guide Through Mount Auburn. A Hand-book for Passengers Over the Cambridge Railroad (Boston, 1875), p. 32.

A picture of Spurzheim's grave as it appeared in 1875 is reproduced in Walsh (n. 2), but the circular iron fence which once surrounded it has since been removed.

The characterization of Spurzheim which emerges from the preceding account in this chapter when coupled with the depiction of him in Chapter III is that of a man so totally convinced of the correctness of his views that he literally devoted his life to their dissemination. He was a man who was able to attain the respect of almost all who heard him speak. As one can gather, he was charming and amicable and he easily enamored those with whom he had personal contact. In Boston particularly, his "evangelical" approach and overexertion in spreading the phrenological gospel must have overpowered his observers. One can almost imagine many of those who heard him saying to themselves

> If this good man Spurzheim, this well-educated physician, . . . coming as he does from the intellectual capitals of the world, . . . if this altruistic man really believes that what he preaches is the truth, and that what he teaches will, if fully understood, totally improve our educational systems, reform our morals, and improve the condition of the insane and troublesome amongst us . . . if he believes that, and the many other intellectual giants whom he mentions also believe it, who am I to say he is in error?

Although the average Bostonian may have responded as I fancied above, and although men of science may have made similar remarks to themselves, the latter group would probably have also added: "I must look into this phrenology further!" It is this latter type of mentation which probably prompted

the events which are to be discussed in the next chapter--events which grew directly out of the memorable Boston visit of Johann Christoph Spurzheim in 1832.

Epilogue

The practice of preserving the skulls of the deceased is of ancient origin. Not only did primitive peoples engage in such practices, but higher civilizations did so as well. Furthermore, the Roman Catholic Church is considered to be "the greatest collector of crania as relics"[120]--a practice which is, however, more European than American. And, skulls do have their fates. René Descarte's skull, for example, travelled from place to place in Europe for a period and sold at auction at one time for sixteen shillings.[121] Emanuel Swedenborg's skull, according to Henschen, was stolen by none other than a friend of Spurzheim, John Didrik Holm of London, in 1816.[122] After a "cloak and dagger" history, we discover that as of 1965, the skull in Swedenborg's tomb in Uppsala Cathedral was determined to not really be Swedenborg's--the real skull ostensibly is now in the possession of a physician in Swansea, England, whose father was

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[120] F. Henschen, The Human Skull: A Cultural History (New York, 1965), p. 60.

[121] Ibid., p. 111.

[122] J. M. Severn gives a more complimentary portrait of Holm in his Phrenology: The Language of the Mental Faculties (London [?], 1938), pp. 461-464. The likeness of Holm in that work, however, reminds this writer of the type of illustration phrenologists used to depict seedy characters--Severn has nothing but praise for the man!

a phrenologist.[123] But although skulls had a special appeal for phrenologists, they have also had a special appeal to anatomists and physical anthropometrists. The pleasure of ownership of a skull such as Swendenborg's must be of a special nature. But in 1832 and thereafter, anatomical specimens of all sorts--including crania--were used in the teaching of both healthy and pathological anatomy. The anatomical collection which John Collins Warren began early in the 19th century, for example, is still in Harvard's possession--although in an unfortunate state of disarray.[124] Included in that collection is none other than the skull of Johann Christoph Spurzheim, there to be seen today in a place of honor in the Curator's office.

Around the period when Gall was dying in 1828, Cuvier had sent him a skull with the message "that it appeared to him [Cuvier] to confirm his [Gall's] doctrine of the physiology of the brain."

> Take it back [, Gall is said to have stated to the messenger,] and tell Cuvier that there is now only one [skull] wanting, to complete my collection: it is my own; it will soon be there as a powerful testimony of the truth of my doctrine.[125]

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[123]Henschen, pp. 112-122.

[124]See on this collection J. B. S. Jackson's A Descriptive Catalogue of the Warren Anatomical Museum (Boston, 1870).

[125]As quoted in N. B. Shurtleff, "Anatomical Report on the Skull of Spurzheim, Read Before the Boston Phrenological Society," Annals of Phrenology, 2 (1835):73.

And so it is![126] Not to be outdone, and, perhaps in the spirit of fair play, Spurzheim too wished to have his skull added to his collection after his death. It was mentioned earlier in the chapter that John Collins Warren performed the public autopsy on Spurzheim. This event took place on 12 November 1832, five days before Spurzheim's funeral, and the hand-written autopsy report is now in the Warren Papers at the Massachusetts Historical Society (Boston). Shortly after the funeral, Nathaniel B. Shurtleff and Winslow Lewis removed Spurzheim's skull, brain, and heart--preparing and bleaching the skull, and preserving both the brain and the heart for public view. These famous mementoes were destined to become the honored possessions of a group of men who had honored and "wined and dined" their former owner--a group of men who, but a few weeks before, had passionately banded together to dispassionately investigate the truthfulness of the philosophy their friend had expounded. With the skull and brain of Spurzheim in their possession as their first piece of data, data which Spurzheim had told them would "prove" what his dispositions were, and, "afford the best answer" to his calumniators (i.e., prove the truthfulness of his doctrines), the Boston Phrenological Society began its inquiries, inquiries which

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[126] A photograph of Gall's skull appears in E. H. Ackerknecht and H. V. Vallois, Franz Joseph Gall, Inventor of Phrenology and His Collection (Madison, Wisconsin, 1956), p. 68.

would last for at least the next ten years.[127]

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[127]The interested reader will find an illustration of Spurzheim's skull in Walsh, "The American Tour." The measurements of that skull are given in Appendix E. They are provided for the individual who may have an interest in comparing its anthropometric measurements (after Shurtleff) with those taken of Gall's skull presented in Ackerknecht and Vallois.

CHAPTER VI

THE BOSTON PHRENOLOGICAL SOCIETY, THE RISE OF "SCIENTIFIC" PHRENOLOGY IN AMERICA, AND THE SPURZHEIM COLLECTION AT HARVARD

The historical background which has been presented thus far in this work has been designed to introduce and to make more meaningful the subject matter of the present chapter. An appreciation of these facts which have been thus far written will, it is therefore hoped, better prepare the reader for the following account of the phrenological activities in Boston during the years 1832 to 1842. It has been shown, for example, that what one commonly thinks of when the term phrenology is employed involves a much more complex history and position in the scheme of evolving science than one might have imagined. It has been shown furthermore that Johann Christoph Spurzheim was not viewed during his day simply as a misguided anachronism the way some view him today, but, rather, that he was seen as a respected physician-philosopher and more as a prophet, in a loose sense of that word, insofar as his views were seen as being extremely foresightful. His American tour, personal influence, and untimely death were directly responsible for the formation of phrenological societies, the goals and purposes of which were to determine the truthfulness and practical applicability of phrenological theory. For despite the fact that phrenology

had experienced a brief vogue in Philadelphia in the early 1820's (see Chapter IV),[1] a contemporary in 1832 was still able to write that

> When Spurzheim visited the United States, Phrenology was a new subject. So far as it had been discussed, it was perverted and misrepresented. It is true that societies had been formed in Philadelphia and in Washington, D.C., and lectures had been delivered by Professor Charles Caldwell, of Kentucky, but these efforts were insufficient to counteract the influence of foreign reviewers and a class of editors at home who were accustomed to repeat opinions from abroad without examination. In this state of things a mastermind was wanted to combat the prejudice of the people and to undeceive the learned. If there were one man more capable than all others in the world to set forth the claims of this important science and to defend it, that man was Spurzheim. . . . . The immediate result of Spurzheim's . . . [tour was] most gratifying both to him and to the public . . . [its] effect upon the minds of leading men and editors produced an excitement throughout the country. It was one of inquiry. Phrenological societies were numerously organized, courses of lectures were given upon phrenology, and the subject was almost everywhere discussed, at the lyceums, in the social and debating clubs, and by the public press [Italics mine].[2]

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[1] The Philadelphia Journal of the Medical and Physical Sciences (1820-1827), although sympathetic to phrenology during its early years, increasingly reduced its coverage of this topic. When it evolved into the American Journal of the Medical Sciences after 1828, little mention is made of phrenology. Volumes 7-11 from 1830-1832, for example, make no mention of it; Volume 12 reviews Spurzheim's Physiognomy (Boston, 1833) only; and, Volumes 13-15 (1833-1834) again eschew phrenological intelligence and make no mention of Spurzheim.

[2] N. Capen, Reminiscences of Dr. Spurzheim and George Combe: and a Review of the Science of Phrenology, from the Period of its Discovery by Dr. Gall, to the Time of the Visit of George Combe to the United States, 1838, 1840 (Boston, 1881), pp. 115-119.

Shortly after Spurzheim's late afternoon funeral on 17 November 1832, an informal gathering of his Boston friends took place in the building then occupied by his American publisher, Marsh, Capen and Lyon. What prompted this gathering was probably a combination of unspecific events but included no doubt the passion of the moment. In any case, the coming together of this notable assemblage was for no other purpose than to organize themselves immediately into a society to inquire into the truthfulness and usefulness of the phrenological tenets so recently expounded by their lamented progenitor Spurzheim. Nahum Capen served as secretary and Dr. J. D. Fisher offered the following resolutions which were voted on and passed:

1. Resolved, that we form ourselves into a society to be called "The Boston Phrenological Society," instituted for investigating the science of Phrenology and its bearings upon the physical, intellectual, and moral conditions of man . . . [and]

2. Resolved, that a committee consisting of Hon. John Pickering, Dr. Jona. Barber, Dr. Samuel G. Howe, Rev. John Pierpont, and Wm. B. Fowle, Esq., be appointed to draft a Constitution and By-laws for the government of the Scoiety, and that the said committee shall have power to invite others to act with them.[3]

A little over a week later, on 28 November 1832 the charged committee returned with the proposed Constitution and By-laws which were then voted on and adopted. It was further voted at that time that the society should hold

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[3]Ibid., pp. 119-120.

"annual meetings" on the day of Spurzheim's birth, 31 December. At this meeting, finally, it was further voted to petition the State Legislature for an Act of Incorporation (this was ultimately granted and signed by the Governor in March 1833). The founders and members of the guidance committee now had the responsibility of seeking out and bringing into the phrenological fold all persons interested in the advancement of phrenology. Although the wording of the above account suggests that the Boston Phrenological Society's (hereafter referred to as the BPS) organization and proposed modus operandi were a fait accompli as a result of these two organizational meetings, the society's formal organization is dated from 31 December 1832 at which time the public was invited to attend. On that date the following announcement appeared in the Boston Daily Evening Transcript:

> Notice. An adjourned meeting of gentlemen interested in the organization of a Phrenological Society will be held in the lower Hall of the Masonic Temple, on Monday, Dec. 31st, at 7 o'clock p.m.
>
> A constitution will be reported for adoption, and an Introductory Address will be delivered by Dr. Jonathan Barber.
>
> Those who feel an interest in the subject are respectfully invited to attend.
>
> Nahum Capen, Secretary[4]

Simultaneous with the organizational events described above were events which in their effect were serving to keep the memory of Spurzheim and phrenology alive in Boston during

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[4]Boston Daily Evening Transcript, 31 December 1832.

the winter months of 1832. It was mentioned in the previous chapter that Spurzheim's skull was preserved. No doubt this was displayed if not for public at least for private scientific view. His remains--properly embalmed--were deposited in a leaden coffin prior to his burial at Mount Auburn and "the abdominal viscera, the thoracic viscera, and the brain, were severally preserved in separate cases."[5] Two portraits were painted by Alvan Fisher and announcements appeared in the papers around this time that a lithographic reproduction of one of Fisher's works was available for sale. A bust had been taken prior to the disarticulation of Spurzheim's head, a cast of his brain was also made, and a death mask obtained. This latter macabre grouping was probably reproduced for some of Spurzheim's immediate associates in the form of souvenirs. They were definitely reproduced after the BPS became formally organized; but, in any case, they probably were, if not ubiquitous, at least sufficient in number to serve the purpose of keeping the memory of Spurzheim alive.[6]

No written records have come down to us which this writer was able to locate which serve in and of themselves as a permanent record of the activities of the BPS. Furthermore, there is no indication in any source that such records

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[5] Boston Med. Surg. J. 7 (1832):239.

[6] A. A. Walsh, "The American Tour of Dr. Spurzheim," J. Hist. Med. All. Sci. 27 (1922):187-205, and Boston Daily Evening Transcript, 19 November 1832.

were ever preserved. The account which is to follow, therefore, has been pieced together from the gleanings from a number of published and unpublished written sources of the period. Manuscripts and published materials have been used equally therefore in this record of events.

A Society is Born: The Boston Phrenological Society, Inc.

No doubt the organizational meeting of the BPS commenced on schedule on the anniversary of the birth of Spurzheim, 31 December 1832. It would have been Spurzheim's fifty-sixth birthday. No record of the numbers who attended has been preserved. Dr. William Ingalls probably presided over the meeting since he had done so at the second pre-formal-organizational meeting of 28 November.[7] The first order of business after the presentation of the proposed constitution in which the society stated among its objects

> The examination of the science of Phrenology, in its bearings upon the moral, intellectual and social relations of man[8]

was the election of officers for the ensuing year. The following members were elected officers for 1833:

> Rev. John Pierpont, President.
> Dr. Jonathan Barber, Vice-President.
> S. G. Howe, M.D. Corresponding Secretary.
> Nahum Capen, Recording Secretary.
> E. P. Clark, Treasurer.
>
> COUNCIL
>
> J. F. Flagg, M.D.
> Joseph W. McKean, M.D.
> Winslow Lewis, Jr. M.D. [,and,]

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[7]Capen, p. 120.

[8]"Phrenology in the United States," in the Phrenological J. and Misc. 8 (Edinburgh, 1832-1834):280.

Wm. B. Fowle.[9]

Other business which was conducted concerned the determination of annual dues. These were set at the rather high figure (for 1832) of $5.00.[10] More permanent quarters were also decided upon and were eventually obtained from the Massachusetts Historical Society for $60.00 rent per annum.[11] These affairs having been conducted, Vice-President Barber addressed the assemblage:

> We are met, Gentlemen, on this occasion, for the purpose of consummating the formation of a Phrenological Society, by the submission of the final draft of the constitution, and the choice of officers. I presume, from the tenor of the former, that our object is, primarily, to examine the fundamental data of Phrenology; in other words, the doctrine maintained by phrenologists, of the coincidence of certain external manifestations on the cranium, with the intellectual faculties and predominating moral tendencies of individuals.
>
> Secondly, we propose to admit within the scope of our inquiries, whatever relates to human welfare, under the general term of Anthropology: the means of improving education, of bettering the condition of prison discipline, of regulating punishment with a view to reformation of criminals, and the lessening the number of crimes; of determining the value and advisable extent of eleemosynary [i.e.,

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[9] J. Barber, An Address Delivered Before the Boston Phrenological Society, on the Evening of its Organization at the Masonic Temple, Dec. 31, 1832 (Boston, 1833), p. 41.

[10] J. B. Brereton to Nahum Capen, 22 December 1834, Nahum Capen Papers, Call no. BMS/c23, Countway Library of Medicine (Harvard Medical School), Boston gives this $5.00 figure for the dues. They may have been different in 1832 but records are not available to verify this.

[11] The Treasurer of the Massachusetts Historical Society reported this rental agreement in his report for fiscal year April, 1832-April, 1833, Proceedings Mass. Hist. Soc. 1 (Boston, 1879 [1791-1835]):488.

charitable] establishments, of simplifying the principles of political economy and morals, and thus giving them greater certainty. I conceive that inquiries on these and kindred subjects, naturally fall among the objects to be, finally, considered by a Phrenological Society.

As, however, our views on other subjects of Anthropology cannot fail to be greatly modified by the truth or falsehood of Phrenology, I venture strenuously to recommend, that it be our first object to obtain the evidence necessary to determine on its pretensions.

The time of our meeting, Gentlemen, on this last day of the year, has, as you know, a special reference, being the birthday of Dr. Spurzheim, one of the founders of Phrenology, as well as the accomplished advocate of the science. To his recent visit and labors amongst us, the existence of our Society is directly owing. In the midst of us he delivered his latest testimony in its favor; a testimony to which death has now to bestow upon it a more than common interest.

As respects himself, he died, as it is enviable for such as are prepared, to die; in the very midst of his labors, whilst eagerly engaged in the explanation and defense of favorite doctrines, to which his life had been devoted, and which he deemed in the highest degree momentous to human happines.

I presume none of us would wish to evade the admission, that our organization as a Society, is attributable to the impression we received from his lectures; an impression, strengthened on my part, by the perusal of several of his works, published since his death, which have placed his name under the sanction and safeguard of immortality. They contain a body of truth, worthy the earnest consideration of the age, and appear to me to place their author, for comprehension, originality, good sense, discrimination, and benevolence, in proud competition with the most celebrated founders of moral sects. In these remarks I allude particularly to his "Catechism of the Natural Laws", and the "Treatise on Education."

I will not, on this occasion, indulge in the expression of feelings prompted by personal regard, and the recollection of the friendly and

> improving intercourse I had the honor and happiness to enjoy with this enlightened and amiable man--nor will I dwell on the painful emotions which its sudden and unexpected cessation occasioned, and with which I watched his progress to the gates of death. Confident, that if he could be heard from that state of pure intelligence and perfect happiness on which I humbly hope he has entered, he would request us to abstract ourselves from personal feelings and regrets to the objects of his own enthusiastic labors, I will at once call your attention to the points I propose to discuss. I have thought the most suitable may be,--the claims of Phrenology as a subject of inquiry--the proper method of investigating its evidence --the duties arising from a conviction of its truth or falsehood.
>
> The importance of Phrenology cannot be viewed in the same light by those who are not in possession of the proofs it has to offer, as by those who are perfectly satisfied of their validity. I propose to consider its claims as an inquirer, not as a convert.12

One can find little to criticize in Barber's indirect directive to the membership to not approach phrenology as converts; but, rather, to approach it as inquirers. Granted, there may have been auditors at that meeting who were already "converted" and were only seeking to learn more about the science they fully embraced. But for those who came to discover what the BPS could offer them, or simply came out of curiosity, they discovered that the organization's formation was for the scientific collective purpose of gathering data and communicating the findings. Barber proceeded in his thirty-eight printed page address to outline what the "presumptuous science" of phrenology "claimed" as "established." He comments that he always speaks in "her" (phrenology's)

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[12]Barber, pp. 3-5.

name--not his own--, in this regard, and refers to phrenologists as "presumptuous reformers." After a discussion of phrenology's tenets he adds

> Such are some of the principal claims of phrenology as urged by its advocates. What shall we [the BPS] say to them? Are the facts to which they appeal, to be considered as questionable? Is the classification founded on them to be considered imaginary? Are the coincidences on which they insist, a delusion? At least, do exceptions bear such a proportion to their rules, that decision is uncertain and not to be relied upon? To what are we to attribute the lucky hits on record which have been made by phrenologists? To these inquiries we look for our answer in the researches of this society. This answer we shall obtain if proper methods of pursuit are adopted [Italics mine].13

Barber continued and took issue with Spurzheim's claim to be able to distinguish "what he [Spurzheim] calls the different organs, even when detached from the mass of the brain." Although he admitted that a "well practiced phrenologist"--like a skillful anatomist--could place his finger on that "part of the brain assigned, whether rightly or not, to cautiousness or hope, or any other specified faculty," he still concluded that "we have advanced no farther than the demonstration of variety in the shape and arrangement of what, for aught we yet know, may be a single organ." He then added: "the evidence of a plurality of organs does not yet appear and without its admission there is no phrenology."[14] But Barber a "Member of the Royal

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[13]Ibid., p. 20.

[14]Ibid., p. 23.

College of Surgeons, London," could not refrain from describing for his auditors what should be done to settle the issue. He continued:

> What is absolutely required to prove a plurality of parts is, that with the absence of certain portions, indicated by the phrenological divisions, there should be absence of the assigned functions, with their presence the presence of their functions, and that the vigor of these should be proportionate to the relative development of the particular parts. For instance, phrenologists place the intellectual faculties in the anterior lobes; they ascertain their relative size by measuring them forward from the outer convolutions assigned to [the faculty of] constructiveness, and adding to this measurement their breadth and height. They maintain, that upon the relative size of the forehead, so measured, depends the intellectual capacity. The division thus made they call the frontal region. They divide off another region assigned to the moral faculties, [and so on] . . . declaring that the relative development of these respective parts will determine . . . [ceteris paribus] the moral and animal characteristics of the individual. Now if this be true, it proves to my mind a plurality of parts in the brain. Separate general portions--separate classes of functions--and thus certain general phrenological conclusions are established . . . if in a dozen instances of persons remarkable for caution, the convolutions assigned to that faculty, (however arbitrarily, or by whatever chance if you will) are found large compared with the common standard, and the direct contrary takes place in the same number of persons distinguished for their carelessness, I say if this be so, there is truth in phrenology, and no a priori reasoning can overturn it. The same method of inquiry may be extended to other parts in connection with other functions. I am here endeavoring to indicate the method of investigation for us.15

The aforementioned remarks by Barber are a curious admixture of empiricism in both its former and contemporary

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15Ibid., pp. 23-24.

meanings. In the beginning he seems to be suggesting that ablation is the only method of study "absolutely required to prove the plurality of [cerebral] parts." Although he does not use that term he must have been aware of the classic ablation experiments of Pierre Flourens (1794-1867) published almost ten years earlier. He seems to be suggesting further that one must induce artificially the absence of cerebral portions to determine their function when present. That would be the empirical (i.e., experimental) approach in the modern meaning of that term. Rather than actually suggest that however, we discover as we read on that what he really meant for the society to do to "investigate" phrenology was to rely solely on experience--empiricism in the old sense--and by means of induction and observed co-relationships seek out support for or evidence against the phrenological point of view.[16] This is in fact the procedural course the members of the society actually followed. Little indication was discovered to support the contention that methodical experiments were ever conducted by the BPS collectively or by its individual members. No data of an experimental nature was presented at its meetings nor published in its journal. This is not to say that the research of the BPS was unscientific. Its primitive approach to the issue --correlational in nature--is only considered to be less

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[16] On Flourens' work see his Recherches Expérimentales sur les Propriétés et les Functions du Système Nerveux dans les Animaux Vertébrés (Paris, 1824).

scientific than we moderns would prefer. Correlational data, however gathered, and while not implying causation, can and does have predictive value. Clinical psychology and psychiatry are replete with such facts today although it is granted that data collection and analysis procedures have improved. Part of the key to the use of correlational information depends on a methodical collection and recording of facts, measurements, instances and the like, and it was this procedure which these early behavioral scientists followed despite the fact that they lacked the statistical tools to analyze what they discovered. Furthermore, in 1832 as is often the case today, these early behavioral scientists (i.e., phrenologists) were more interested in the extremes of mankind than they were in the ubiquitous average (or typical) characters. In any case, Barber's address set the course for the BPS membership by stressing the types of activities in which they should engage as honest inquirers and to point out the sources at which they should direct their attention. After concluding that he (Barber) did not believe the objections to phrenology to be so formidable as to "deter us from an honest and persevering investigation of the evidence upon which it is said to be founded," Barber enjoined the membership with the following charges:

1. "In joining this society, I take it for granted, that all the means necessary to determine on the truth or illusiveness of phrenology, will be provided, and that every facility will be afforded for acquiring a thorough knowledge of it. I need not dwell on the importance of anatomy,

in every physiological investigation. The society should provide for a thorough system of instruction in the anatomy of the brain, spinal marrow, and nerves of the senses;"

2. The society should provide for thorough instruction in the anatomy of the cranium "within and without together with the external coverings;"

3. "In demonstrating the cranium, the places of the respective organs, assigned by phrenologists, and their boundaries, should be pointed out. These should also be shewn on the brain itself, and their position should be always indicated in connexion with the sutures eminences and depressions of the different bones, which have received anatomical designations. In this way our members will become familiar with the exact seat of the organs, and be able to determine their relative size, when they approach them in the living head;"

4. "Dr. Spurzheim dwelt much on the importance of considering the general shape of the head, apart from isolated prominences, or depressions. With reference to this object, the society should spare no pains in obtaining a well selected assortment of national skulls. The history of nations may thus be studied in direct connexion with organization, and in this way, as it seems to me, the truth of phrenology in its general outlines, be at once verified, or disproved. The society should lose no opportunity of laying military and naval officers, captains of merchant ships, and travelers, under contribution in this respect, or of obtaining supernumerary specimens, with which sister societies may be disposed to favor us. Casts already in existence, and which, in the opinion of experienced phrenologists, may be necessary fully to verify the data of the science, should be procured and deposited in the museum;"

5. The museum should be assigned curators and they should be instructed in "best methods of taking casts, or busts, in order to enable the society, at any time to procure accurate ones of criminals, or of distinguished individuals in any line, who may be willing to submit to the operation. To procure such should be a constant object with the society;"

6. "The examination of the heads of criminals, of children of extraordinary ability and character, of the insane, of idiots, or persons committing suicide, and of those born with the absence of one or more of the senses" should be a constant object of the society as "among the best means of verifying phrenology;"

7. "In our attempts to understand the organization of the head, we should proceed gradually. The regions should first be understood, and our efforts be confined to ascertaining the truth of the general doctrine connected with them. Then the inquirer should proceed to the particular organs--and, thence to the consideration of some of the leading combinations as found in the heads of men distinguished in particular pursuits, as mathematicians, musicians, painters, mechanics, &c. This will be the only method of avoiding failure and discouragement in our early attempts to decypher the oracles of phrenology;"

8. "Our members should be invited to communicate freely the results of individual inquiry and observation, and a record should at once be opened for such as are deemed important;"

9. "Dr. Spurzheim thought that the comparative anatomy of the brain should never be lost sight of as a means of verifying phrenology . . . Our opportunities for examining the brains of animals may not be as extensive as are supplied in Europe, particularly in France, where comparative anatomy is cultivated with ardor; but many may be found everywhere by the earnest inquirer into nature, and should be carefully turned to account. The crania of different tribes of animals then, should be obtained as extensively as possible, in making our collection;"

10. "If the result of our investigation be conviction of the truth of phrenology, a very wide and interesting field of labor will be presented to the members of our society. In the first place it will be our duty to incite the public, by every means in our power, to a serious consideration of its claims. It has been said, that phrenology can never be made useful. If the science be true, I must dissent altogether from such an opinion. An accurate knowledge of the functions of the brain, and of the

manifestations by which they are indicated in particular cases, is knowledge of the human mind, and a much more specific knowledge than can be attained independent of physiology. It would be vain to reason with persons, who, granting such a knowledge attainable, deny its utility. To make known the claims of phrenology, then would be our first duty, if convinced of its truth . . . Our society, if convinced that the principles of phrenology have their foundation in nature, will, I repeat, be bound by every consideration of duty and of honor to proclaim their opinion; and in that case, I trust no individual amongst us will hesitate or falter. In that case too, we shall find ourselves at once engaged in the application of the data of this new science to many branches of anthropology. I think the principle of calling into exercise the activity of our individual members should prevail with us throughout, both in investigating the science, and, supposing its claims to appear satisfactory, in its subsequent application to different branches of knowledge;"

11. "Let every member, as far as possible, be invited to take a part according to his particular talents, taste, occupation, or profession. A division of labor in this way, will be of the utmost importance, both in maintaining our interest and energy in the pursuit, and in making known the truth. One may be employed in demonstrating the anatomy. Another in exhibiting the physiological proofs. A third may take the metaphysical department, inquiring into the application of the principles of phrenology to the mental powers. Others may be employed in considering its application to education. The comparative influence of education, and of native powers in directing to particular pursuits, in insuring success in the, and in the establishment of the moral character, is a curious and important subject, and one by no means exhausted. This subject should be considered with reference to different grades of mind. It is manifest, there are powers which shape their own ends, as the magnet amongst a thousand substances attracts the particles of its kindred metal. Again, in moral goodness, there are those who are a law unto themselves. But there are others, constituting the middle classes in intellect and morals, to whom education is of greater importance. These are

mere hints. It is of course impossible, on this occasion, to descend far into the subject.

The Divine may inquire into the harmony existing between the moral and intellectual laws, and the sublime lessons and glorious hopes of Christianity. Popular essays, founded on phrenology, would have all the interest of novelty, and, descending to the details of private manners, and social habitudes, might be fraught with practical lessons, coming immediately home to men's business and bosoms. Vanity, pride, luxury, thefollies and the vices of the time, which have defied other correctives, might feel the force of a new mode of assault, and something be gained by the additional impulse thus employed against them;" and,

12. "Let us not be deterred from a sober investigation of the subject by attacks ingeniously devised to act upon the pride of intellect; by the appellation of second-rate men, or third-rate men, or even fourth-rate men, enthusiasts, gatherers of worthless fruit from the minor twigs of the tree of knowledge, and so forth. These epithets are often employed by the selfish and superficial, in order to intimate that they cannot be deserved by themselves. It is no uncommon thing to see ridicule sitting in the solemn chair of decision, laughing like an idiot at the phantoms of its own creation.

Some will be indisposed to hazard an intellectual name by joining us. They attend lectures on phrenology as an amusement, or at most, because stray crumbs worth picking up, may be expected occasionally to fall, or because the ingenuity of the lecturer may invite them to spend in this way an idle hour. Others, who feel curiosity and interest on the subject, cannot without hazard to private interests become active members of a phrenological society. Many who are not with us will not be against us. I am disposed to believe that few persons have decided with themselves that phrenology is not true. However this may be, we have associated for a specific object--we choose to act independently--we are strictly inquirers--we neither sue for, nor shun associates. Let this be our course as a society. Let us honestly declare that phrenology comes so commended to us, that we feel inclined to examine

> its claims, and having done so, let us fearlessly and conscientiously report accordingly."17

With these rather lofty goals stated, the membership was no doubt moved if not to commence work immediately, at least to adjourn to contemplate their society's future. At this juncture, furthermore, active membership was probably arranged and recorded by the collection of dues by the treasurer, E. P. Clark. I mentioned earlier that a list of members--or rather, a list of those in attendance on 31 December 1832--was not located. Capen, however, has recorded the names of some of the more prominent members of the BPS which included, in addition to the officers already listed "Rev. Henry Ware"(American Biography 19:448-449),[18] "Rev. Dr. [Orestes Augustus] Brownson"(American Biography 3:178-179), "Hon. John Pickering" (American Biography 14: 564-565), "Hon. Abbott Lawrence"(American Biography 11:44-46), "Hon. J. W. Edmonds" (American Biography 6:23-24), "Wm. P. Mason" (American Biography 12:377-378),[19] "Samuel Downer" (American Biography 5:415). "Jonas Chickering" (American Biography 4:65), "William A. Alcott" (American Biography 1:142-143), "John Appleton" (American Biography

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[17]Barber, pp. 30-38.

[18]See n. 1, Chapter V.

[19]Two Wm. P. Masons are listed in the Dictionary of American Biography and either one could have been the one referred to by Capen, p. 121, n. 1, Chapter V.

1:328-330),[20] and "Alvan Fisher" (American Biography 6: 403-404). Other members are listed in Capen including those elected to honorary membership at various times.[21]

Not long after the formation of the BPS, the European phrenological world took note of it. The Phrenological Journal and Miscellany (Edinburgh) announced the new organization noting that as of 22 February 1833 "the number of its members was about seventy-five." If that were the case, and if the dues at that time were $5.00, an initial operating budget of $375.00 was probably adequate to get the new organization on its inquiring feet. An anonymous letter from a member of the BPS to the Edinburgh Journal, furthermore, gave those readers an account of the newly formed group.

> Our Society is composed of persons from the various professions, he wrote, and from almost every sect of Christians. The medical faculty is fully represented--there being no less than twenty [out of 75] of our members belonging to that profession. Dr. William Ingalls, one of our oldest and most respected physicians, lectures on the brain, and Dr. [Jonathan] Barber on the cranium.
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> Investigation is our aim, and truth our object. Preconceived opinions and prejudices are suspended, and we are determined to abide by the result of our studies . . . We are in pursuit of truth, and shall fearlessly multiply facts and observations until blessed with a conviction, founded on the immutable principles of our nature . . . What is quite singular . . . [about phrenology in Boston is that it] finds friends among religionists of almost every denomination, each one discovering something in the science to sustain his peculiar

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[20] Two Appletons are also listed in American Biography.

[21] Capen, p. 121.

> doctrinal tenets. This being the case, our Society is relieved, in a degree, from the worst of all opposition to true philosophy, the dictatorial spirit of religious intolerance and prejudice.
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> We anticipate from the formation of the Boston Phrenological Society the happiest results. Its members . . . have . . . entered upon the task of ascertaining, by observation and study, whether the doctrines of Gall and Spurzheim be really founded in nature.22

While it might be a bit premature to speculate here as to the reasons for the BPS's ultimate demise--this will be returned to later in the chapter--, one aspect of their proposed and ultimate modus operandi, while exhibiting commendable zeal, probably accounted for changes in the membership over the years and the eventual waning of interest. Membership in the society increased at least until 1835, we are told, and at one time numbered one-hundred and forty-four members.[23] As the reader can gather from the titles affixed to the names of some of the members already mentioned, they were for the most part professional men. Of the one-hundred and twenty or so members eventually reached in 1833 (or thereabouts), we are told furthermore that the group consisted of twenty-five physicians, ten or twelve lawyers, nine clergymen, and the remainder teachers, merchants and mechanics.[24] Needless to say, the membership was composed of other than full-time phrenologists. The

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[22]"Phrenology in the United States," p. 280.

[23]"Lectures of Mr. George Combe, in Boston and New York, With a Brief History of Phrenology, and its Present State in the Former Place," Amer. Phrenological J. and Misc. 1 (Philadelphia, 1839):118-128, and Capen, p. 120.

[24]"Lectures of Mr. George Combe," p. 120.

society's activities, which were ultimately retrospectively described as being "regular and efficient," consisted of having scheduled meetings every two weeks! The meetings involved lectures, demonstrations and the like, some open to the public, but most of them were of a didactic character for the enlightenment of the membership. It would be an understatement to comment that such regularity and over exposure to a topic would satiate one quite quickly, particularly if one were simultaneously engaging in one's professional occupational pursuits. I would like to suggest, therefore, that the commitment to a bi-monthly meeting schedule (i.e., a meeting every two weeks) which must have originated at the organizational meeting--was a commitment which must have been evoked over-zealously and in haste and may be considered to have contributed to the society's eventual decline. But I digress, at the beginning of 1833 the membership was optimistic and envisioned nothing but "the happiest results." Further speculation regarding the society's decline will be returned to momentarily.

The Activities of the BPS: The Early Years

With the optimism that the advent of a new year affords, the BPS swung its resolutions into high gear. To fulfill their resolve to disseminate phrenological knowledge to its members and to the world, it was voted on 4 February 1833 to publish Dr. Barber's inaugural address. This was the society's first formal publication and its sale may have reaped some financial benefit for the newly-formed group.[25] Regular meetings were held on the approved two-week schedule, lectures on various pertinent topics were given, the collection of data--i.e., the collection of further examples of cases in the form of plaster casts of notorious heads--began, representatives were sent on the road, if you will, to lecture, and plans were begun to publish an American journal devoted to the science. The saying from the gods, "written up in the temple of Delphi" to "Know Thyself" was at this early stage of American phrenology guiding somewhat the membership of the BPS.[26] That is, while the BPS was a collective insofar as the membership had mutual interests, the members worked individually in their pursuits of the "truth" banding together at regular intervals for mutual, i.e., individual, improvement. This was to present curious problems toward the end of the year 1833 which will be

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[25] Barber, p. 41.

[26] The Oxford Dictionary of Quotations, 2nd ed. (London, 1966), 12:23.

mentioned momentarily. In any case, the membership was attempting to follow Spurzheim's enjoinment to seek truth on the individual level. The Boston Medical and Surgical Journal in its announcement of the new society in their Wednesday 9 January 1833 issue commented in regard to this that

> This society [the BPS] contemplates the objects and is founded on the principles that would have been most gratifying to the late lamented founder of the science. He explicitly stated, in private and public, that he desired no one to believe in Phrenology on his authority or that of any other man or body of men. All he asked of his fellow men was, that each would examine the subject for himself, without prejudice or partiality, and abide by the result of his researches. He was confident that this course was not only the most proper and philosophical in itself, but that it would also tend, more than any other, to remove the false impressions too general respecting his principles of mental philosophy, and to ensure them the confidence and favor of the most able and intelligent of the lovers of truth [Italics mine].

Except for the fact that many of the meetings of the BPS were designed to instruct the membership on general phrenology-related topics, their meetings may have been very much like the annual meetings of national societies today during which an array of individual research efforts are reported by individual researchers all of whom are laboring, however, naively or obscurely, toward a common goal. Meeting every two weeks of course, was bound to create special problems. One can well imagine the turmoil of, say, the American Psychological Association, trying to maintain solidarity under such a schedule. In any case, Spurzheim's "mantle"

was in the descendant during these early months, and was to be picked up on this continent by a prominent member of the BPS.

In a letter from Dr. Robert McKibben to George Combe dated 5 January 1833, McKibben sent Combe a lock of Spurzheim's hair (half his supply so he stated) while pointing out to Combe that the phrenological mantle which fell from the shoulders of the departed Spurzheim rested now on his (Combe's) shoulders. While this was actually the case historically--Combe did replace Spurzheim as the titular head of phrenology world-wide--The American Journal of the Medical Sciences around this same period commented that "The prophet (Spurzheim) is gone, but his mantle is upon us," i.e., upon Americans in general.[27] On 27 March 1833, however, the Boston Medical and Surgical Journal quoted from what they characterized as an "accurate and liberal notice" of the death of Spurzheim which had appeared in The London Medical Gazette. "This indefatigable follower of Gall died last month at Boston, United States, of 'brain fever,'" the Gazette wrote, adding that "we know not on whom, if on any, his mantle will descend; but we hope no one will be foolish enough to bring it across the Atlantic."[28] But the elusive mantle had already "descended" in Boston, and the journal felt it incumbent on them to point out to the Editor

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[27] Amer. J. Med. Sci. 12 (1833):473.

[28] Boston Med. Surg. J. 8 (1833):105.

of the Gazette

> . . . that a highly gifted individual has been found in this city [Boston] foolish enough to assume the mantle of our departed friend, and that he has already crossed the Atlantic with the design of preparing himself the better to bear the responsibility and the honor of his assumption.29

The Bostonian thus enmantled was none other than the conservative Vice-President of the BPS, Dr. Jonathan Barber.

Although I was unable to verify that Barber had "crossed the Atlantic" early in 1833, reports of his phrenological peregrinations in this country were somewhat ubiquitous. Barber took with him in his travels part of Spurzheim's collection of casts and charts which he and the BPS no doubt borrowed from the administrator of Spurzheim's estate, Thomas W. Ward (Spurzheim's personal property was not sold at auction until 1834).[30] Barber, as the BPS's plenipotentiary delivered lectures in Salem, New Haven, Providence and other places in New England.[31] At one point, furthermore, he lectured as far south as Charlestown, South Carolina, and Savannah and Augusta, Georgia. He was joined in his efforts by his nephew Mr. Dunkin and William P. Fowle --the latter of whom remained to lecture in Boston, while the former lectured in various places from time to time,

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[29] Ibid.

[30] Walsh, p. 203.

[31] "Phrenology in the United States," Annals of Phrenology 1 (1833):144.

including for example, Nantucket.[32] Barber remained the peripatetic par excellence (during the 1830's), however, and in the winter of 1838 (3 November), for example, we discover him lecturing in Glasgow, Scotland where he was said to be still giving "very successful . . . delineations of character."[33] His efforts in Connecticut during 1833 (to /and/or 1834) were very successful. From New Haven Barber wrote Capen on one occasion

> "Many thanks for your communication. I rejoice to hear of the unanimity and zeal of the [Boston Phrenological] Society. Its interest is ever near my heart. I have the pleasure to tell you that my introductory lecture [here] was attended by something short 120 [--in any case] more than 112. Among them [are] professors and the audience consisting of the first citizens for talent. In consequence shall I say that all went well? Subject, the claims of Phrenology 1st on the point of the authority of its frequent advocates and 2nd the futility of objections, particularly materialism and fatalism. I am glad I took this course. It was necessary here. Professor [Benjamin] Silliman [of Yale] has put a strong statement in the papers favorable to my sentiments and the science, which I will endeavor to send you. They say the [lecture] room will be full on Monday . . . when I am to lecture on the [phrenological topographical] regions . . . [Furthermore,] Professor Silliman will probably have a [phrenological] collection [of casts and skulls assembled] for the college. I shall of course try to form a Society here and shall strongly recommend the study of the works of our lamented Sage and friend. I am

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[32] Ibid; J. D. Davies, Phrenology Fad and Science. A 19th Century American Crusade (New Haven, 1955), p. 20, and Phrenological J. and Misc. 9 (Edinburgh, 1835):286.

[33] Amer. Phrenological J. and Misc. 1 (Philadelphia, 1839):160.

> now at my leisure feasting on his philosoph[y] . . . with increasing admiration."[34]

Barber closes his letter with a request for one hundred copies of Spurzheim's Outlines of Phrenology, notes that he expects a large class in Hartford in July (1833?), and points out to Capen that he has not made any "experiments" at present except in vacations and on afternoons and evenings. Just what type of experiments he referred to is anyone's guess. They were most likely not experiments in the current meaning of that word (cf. however, with Thomas Webb's activities described below). If this letter were in fact written in 1833 as I suspect it was, his move to Hartford in July could not have been more propitious.

Earlier in the spring of 1833, Amariah Brigham wrote Capen for information relating to the organization of the BPS since he and his associates wished to form a phrenological society at Hartford. One might conclude, therefore, that the BPS was now serving as an example--or a model--for similarly interested scientists elsewhere in the nation. On 17 May 1833 Brigham wrote Capen requesting a copy of the constitution of the BPS and also inquiring if the BPS required new members to subscribe to "articles of faith in the science [of phrenology]."[35] He offered to work with Capen in supporting the prodramal Annals of Phrenology, pointed out the excellence of the facilities at Hartford

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[34] J. Barber to N. Capen, n.d., Capen Papers, n. 10.

[35] A. Brigham to N. Capen, 17 May 1833, Capen Papers, n. 10.

for phrenological investigations (particularly the Retreat for the Insane), and added that in a few days several men would be tried for murder in Hartford, "two or more will be undoubtedly hung [Caesar Reynolds and William Teller]," and that he (Brigham) would "examine their heads," "get their skulls if possible," and send Capen an "account of them."[36] On 11 July 1833 Brigham wrote Capen again informing him that "the Hartford Phrenological Society" had finally been organized. There were twenty members and they would hold meetings once a month. The society had started its own phrenological collection, furthermore, with a few casts, and planned to "zealously" inquire "respecting this interesting science."[37] The officers and members of the BPS could not have been more pleased, no doubt, that their example to the scientific community bore fruit so soon. They must have felt that their efforts were somehow influential in bringing the Hartford group together. But they did have other business to attend to and those who remained at home were not idle.

As was mentioned above, William B. Fowle was giving regular lectures in Boston during these early years. A list of these bearing the date 1842 in the Fowle Papers at the Massachusetts Historical Society (Boston) records some of the subjects related to phrenology at which Fowle directed

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[36]Ibid.

[37]A. Brigham to N. Capen, 11 July 1833, Capen Papers, n. 10.

his attention. In 1833 he delivered a series of public lectures at the Masonic Temple (Boston)--a "popular course" of six lectures--for which admission was charged. These may have been given partly for personal gain although they most likely were sponsored by the BPS. As a "Member of Council" for the BPS, Fowle would be perceived as having greater authority ostensibly then those who lacked that title and this no doubt contributed to the series' success.[38]

In July 1833 the BPS appropriated £100 for the purchase of a phrenological cabinet. This sum was forwarded to London but as of March 1834 the collection had not been received. John Elliotson was apparently one of the principles in London who failed to consumate the request on schedule and some of the BPS's lectures in the winter of 1833-1834 were required, therefore, to be postponed.[39] But the society was in possession of a small cabinet in 1833, and in addition, had sent their curator, Nathaniel B. Shurtleff, on missions to acquire additional casts of heads. In the fall of 1833, for example, Shurtleff was sent to Hartford to get casts of the heads of the criminals mentioned in Brigham's letter to Capen quoted earlier, viz., Caesar Reynolds and William Teller. He reported his progress to

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[38] cf. the Annals of Phrenology 1 (1833):272 where they announce that the BPS sponsored lectures at the Masonic Temple, with the MS announcement dated 1833 of William B. Fowle's lectures in his Papers at the Massachusetts Historical Society, Boston.

[39] E. P. Clark to John Elliotson, 28 March 1834, William B. Fowle Papers, Ibid.

Secretary Nahum Capen, on September 4th:

"Mr. Secretary Capen, Sir,

> "A most troublesome time has your humble curator had in getting to this peaceful city [Hartford]. Obliged to lodge 4 miles east of Worcester the first (i.e., Tues.) night--told that it was impossible for him to reach Hartford on Wed. on account of scarcity of stagemen--at last pushed into an uncovered wagon--thence into a chaise--afterwards on top of a stage and at last into a two horse coach crowded with children ' . . .[crying?] and in their mother's arms' he has been fortunate enough to procure a single room (the only unoccupied one in the city) in the 4th story of the U. S. Hotel.
>
> "Dr. Brigham advises me to stay at [H]artford until I shall have secured the casts of the two criminals [Caesar Reynolds and William Teller]--as one of them will be removed to N. Haven. I then arrive at Morristown [New Jersey] on Saturday and leave that place on the first opportunity of conveyance . . .
>
> "N. B. Shurtleff"[40]

The trip to Morristown, New Jersey which Shurtleff mentions was probably to obtain a cast of the skull and a copy of the cast of the head of the notorious Antoino (or Antoine) Le Blanc, who had murdered "Judge Sayre, his wife and servant" at Morristown in May of 1833. A cast of Le Blanc's head is still in the Spurzheim Collection at Harvard. The collection of casts of the heads of criminals, moreover, was consistent with the phrenologists belief that one could learn more from extreme types than average or typical personages.[41]

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[40] N. B. Shurtleff to N. Capen, 4 September 1833, Capen Papers, n. 10.

[41] For a phrenological characterization of Le Blanc see Amer. Phrenological J. and Misc. 1 (Philadelphia, 1838):89-96.

In December 1833 one Thomas H. Webb wrote Capen from Providence, Rhode Island concerning the problems he was having on a mission similar to Shurtleff's. In Providence, Webb was taking a cast of an about to be hung criminal by the name of Miner who consented to such an indignity only on the condition that the casters give a copy of the likeness to his (Miner's) family. Another prisoner by the name of Brown promised to relinquish his body to Webb "to be galvanized upon the express condition that we [Webb and his associates acting for the BPS] safely deliver it [Brown's body] uninjured to his wife (so called)."[42] Webb has suggested in this communication for the first--and, I believe only--time that some type of electrical stimulation experiments were conducted by the BPS or their agents. The specific nature of these investigations, however, has not come to this writer's attention. In any case, on 24 September 1833, pursuant to making didactic materials available for their membership, the executive board of the BPS--represented by William B. Fowle and Nathaniel B. Shurtleff--retained one Joseph Ungaretti, "caster of figures in plaster" of Boston, to prepare moulds from the castings of the heads of Le Blanc, Teller, Reynolds, Spurzheim and others and to cast out on

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[42]T. H. Webb to N. Capen, 28 December 1833, Capen Papers, n. 10. Webb may also have been acting for the BPS as a member of a sister organization, "The Providence Phrenological Society," which seems to have formed sometime after the Hartford group, see the Annals of Phrenology 1 (1833).

demand positives for distribution to the membership of the BPS only.[43]

While engaged in all these activites, the BPS was experiencing difficulties in publishing their journal, the Annals of Phrenology, and did not get Volume 1, No. 1 out when scheduled. The Edinburgh phrenologists, moreover, who had received their prospectus for this journal sometime in 1833, did not receive their copy of Volume 1, No. 1 until

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[43]The agreement entered into by the parties concerned, now in possession of the Massachusetts Historical Society in the William B. Fowle Papers (n. 38) read:

"Sept 24, 1833

"It is hereby agreed between Joseph Ungaretti, Caster of Figures in Plaster, of Boston, and Wm. B. Fowle and Nath. B. Shurtleff, agents of the Boston Phrenological Society, that the said Ungaretti shall take moulds from the Heads of Le Blanc Tellar and Reynolds, in possession of the Society, at the rate of two dollars each, and shall furnish any number of casts required by the society . . . at 37 1/2 cents each; and whereas the said Society have moulds of the skulls of Dr. Spurzheim and Mr. Whitefield, the said Ungaretti engages to furnish the said society with as many casts from these as they may require, at the rate . . . of 25 cents each, the said moulds and casts to be of good materials, furnished by said Ungaretti at the above price, and to be cast in a faithful and workmanlike manner. And furthermore, the said Ungaretti engages and promises not to prepare any other mould of the said skulls and heads, nor to take any other casts than those done for said society, under penalty of fifty dollars, which he hereby engages and promises to pay to the said society through their agents abovementioned, for any break of any article of this contract.

"In testimony whereof the said parties have hereunto set their seals and signed their names, this twenty fourth day of September, 1833.

"Wm. B. Fowle"
"J. Ungaretti"
"Nathl. B. Shurtleff [sic]."

November (or possibly December) of 1834.[44] But although the BPS continually received inquiries from around the country for phrenological information--acting as a type of resource center and clearing house--,[45] there is an indication that the membership was becoming a bit disturbed with the conduct of the meetings at home. On 9 November 1833 William H. Spear--an interested and concerned BPS member --wrote Fowle with his suggestions for revisions in the society's operating procedures. He wrote to Fowle on that occasion stating

> "I plead guilty of not communicating to you at an earlier date my views relative the manner of conducting our Phrenological meetings, but Politicks &c must excuse me. We have formed ourselves into a society for the purpose of aiding each other in our inquiries respecting the truths of Phrenology. How much . . . [?] have we derived from each other during our meetings? Very little I trust. In order to satisfy ourselves relative to the truths of this science we must, to a certain extent, become practical Phrenologists unless we are willing to yield unqualified assent to the observations & assertions of others--which I for one, am not preposed to do, as it is a science founded on observation & the arguments to prove or disprove it are within the reach of every inquiring & philosophical mind. If we wish to test the principles of Phrenology we must acquire the power or skill of accurately locating & determining the relative size of each organ--supposing no one to be predominant but all full & proportionately developed; & then we can easily determine whether any organ is bigger or smaller &c. The first step evidently is to

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[44] Phrenological J. and Misc. 8 (Edinburgh, 1832-1834):379, and Ibid., 9 (Edinburgh, 1834):191.

[45] See for example the letter from Charles A. Cheever, M.D. to William B. Fowle, 12 November 1833, Fowle Papers, n. 38.

locate the organs. I therefore approve of your idea of requiring the members to take a skull and point out the situation of each organ & then give their opinion relative to its size &c. But have all of us the requisite organs sufficiently developed? Would you require an individual in whom form, size & locality weak make to do this? Certainly not. Some of our members can never acquire a facility in locating or determining the size of the organs. We must have a locating & size-judging committee. But those individuals who cannot accurately locate the organs or judge of their relative size will, (provided the reflective faculties large) be able to give us some excellent essays on the peculiar duty and sphere of action of the several organs. They would likewise be able to give us the probable character of an individual in whom several organs . . . [are] decidedly large, his temperament being supposed. I would therefore suggest the propriety of presenting questions like the following-- Reflective powers large. Benevolence small-- . . . [sinuses ? small]--Acquisitiveness large --Secretiveness large--the remaining organs full, what is the probable character? The combinations might be rendered very complex if we wished. Begin & proceed as we do with our young-Ladies in Arithmetic. I think such an exercise would be very interesting & instructive. It would likewise open a wide field for discussion. The variety of combinations which might be presented is enxhaustible. Again would it not be well for different individuals to direct their observations to one or two organs & ascertain the characters of the persons in whom those organs were found small or large & report the same to the society. By such a course of procedure we should be able to place on file a vast number of facts on which an efficient & able committee would be able to make a very interesting report. I have thus endeavored to throw out a few hints on the subject presented to our consideration. The manner in which I have done this is not very logical & in some instances I perceive my explanatory sentences &c are out of place; but trusting you will not judge of my chirography or style by this hasty scrawl I inscribe myself yrs. &c.

"Wm H Spear"

"N.B. Would it be advisable to pass a vote that

> one member might speak to another in the room without an introduction? We must become acquainted with each other or our meetings will never be social. For one I feel very unwilling to approach a stranger whose character is wholly unknown to me but I give offence."[46]

The letter from Spear is a curious one. One gets the impression that there was a great deal of formality associated with the meetings to that point in time and, although Spear suggested that it would be adventitious to make a motion to allow for the interaction of non-formally-introduced members, his suggestions for new activities still suggest to this writer that the BPS was taking a collective role which is best characterized as maternal. The meetings held to that date must have been pure torture--or better still, characteristically Victorian. In any event one can perhaps easily envision the meetings involving more of a social outing for small cliques banded together ostensibly to study the new science, but being so ensnared by the proprieties of the age that heated interactions--during which much more could be learned by all--were discreetly avoided. Although this may be an inaccurate appraisal of the situation, it would not be out of character for that period in our history. Since there are no complete records, however, speculation in points such as this seems not to be out of place. One final point in this regard might be mentioned. The impressions that this writer has of the BPS during this

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[46]Fowle Papers, n. 38.

early period is that there were a select few in that society who served not only as leaders by title, but leaders in fact insofar as it was through the enthusiasm of those few that the many rallied round. The letter from Spear suggests, in this regard, that the membership needed even more guidance on their road to seeking truth. The society needed to proceed in the same way that educators proceeded when teaching young ladies arithmetic--very carefully. The immediate effect of Spear's letter was, as in any well-run organization, to appoint a committee to consider his suggestions. Fowle reported back to the membership on 15 December 1833 essentially adopting--or recommending the adoption of--Spear's suggestions. To improve social interaction the committee recommended "a free exchange of thought amongst the members," adding that

> It should be understood that we are all members one of another, and it should not be considered a breach of decorum for one to address another although a stranger to him. Your committee [, Fowle continued,] are not sure that it would not promote the interests of the society to make a business of introducing to each other all that are unacquainted [sic].47

Although this writer cannot imagine that a highly animated "back slapping" sociable loudly interactive interchange took place as a result of the committee's suggestions, it is quite possible that conditions improved.

It was mentioned earlier that the BPS had issued a

47William B. Fowle, 15 December 1833, Fowle Papers, n. 38.

prospectus for a new journal devoted to the dissemination of phrenological theory, and that there were problems in getting it started. The journal, entitled the Annals of Phrenology, consisted

> . . . of articles from the Edinburgh, Paris, and London Phrenological Journals, and of such original papers as may be selected and approved by The 'Boston Phrenological Society.'

Each number was to consist of 128 octavo pages, issued quarterly, at $3.00 per annum. It is an understatement to say this enterprise had difficulty "getting off the ground" --and staying there. Although no "Committee of Publication" was listed on the cover of the copy of Volume 1 which I was able to locate, Volume II, in the writer's collection, lists Rev. John Pierpont, William Fowle, J. F. Flagg, M.D., and John Flint, M.D. in this role. The firm of Marsh, Capen and Lyon, as the reader might have suspected, served as the publishers.

The title page for Volume 1 bears the copyright date of 1834. As was previously mentioned the journal had actually attempted to get started earlier than that, however, for Volume 1, No. I bears the date October 1833. We find in the "Notices," however, that it appeared sometime after January 1834; for, therein the Editor(s) apologized for delays assuring the reader that the next number would actually be out quite soon. Volume 1, No. 2 did not appear until the Fall of 1834 bearing the month of September as its date of issue and announcing that Nos. 3 and 4 (November and December)

would be out before January, 1835 (?). It had a shabby beginning to say the least.

Volume 1 was an interesting admixture of foreign (mostly) and domestic communications. Charles Caldwell in Article I (in No. 1) of this volume came forth in his characteristic way with a 102-page article vindicating phrenology from a recent attack in the July 1833 issue of the North American Review. That article clearly dominated the first number which only totaled 144 pages. Of the remaining thirty-one articles which when coupled with notices and announcements make up Volume 1, two thirds are reprinted verbatim from foreign sources. In addition to Caldwell's essay, original essays from Boston included a "Report on Infant Schools" in Boston, read before the BPS on 19 September 1834 by five BPS members including Jonathan Barber and William B. Fowle, "Allusions to Phrenology, in the 'Last Days of Pompeii'" read before the BPS by H. T. Tuckerman on 15 January 1835, and an article on the moulding of heads and masks in plaster, written anonymously, but attributed to Nathaniel Shurtleff by the Boston Medical and Surgical Journal.[48] This latter journal in fact commented at that writing that "with the views we entertain of the science [of phrenology], we heartily recommend the Annals to the patronage of the [medical] profession and all others at all interested in the progress of human knowledge."[49] Statements

[48] 12 (1835):98.

[49] Ibid.

such as this by that prominent voice of the medical profession of the period was the type of statement which most certainly prompted at least one European journal to note that "The Boston Medical Magazine defends phrenology in an unqualified manner."[50] Related to this latter comment, the reader will recall that it was alluded to earlier in this work that the Boston Medical and Surgical Journal was edited by a club of sorts, "which met once a month to dine and read papers submitted."[51] John Collins Warren's efforts were mainly responsible for the journal's formation, but he was assisted in his editorial duties by James Jackson, John Graham, Jacob Bigelow, Walter Channing, and later, by George Hayward, John Ware and John White Webster--the latter of whom was hung in 1850 for allegedly murdering Dr. George Parkman and stuffing parts of Parkman's dismembered remains in his privy.[52] In any case, although Warren's journal did not publish what this writer had hoped to find--a running account of the activities of the BPS from 1832-1842--, it did publish many notices on phrenology in addition to articles with a phrenological bearing, and tried, however unsuccessfully, to support the newly formed Annals of Phrenology. We are unable to determine, however, whom on the editorial

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[50] Phrenological J. and Misc. 9 (Edinburgh, 1835):286.

[51] H. R. Viets, A Brief History of Medicine in Massachusetts (Boston, 1930), p. 126.

[52] R. Sullivan, The Disappearance of Dr. Parkman (Boston, 1971).

board was mainly responsible, if there were only one person, for the journal's generally positive supportive attitude toward the new science. We must conclude, I believe, that the editorial board collectively approved of the journal's editorial acceptance of the phrenological point of view. In regard to Warren in particular, although it would be inaccurate to call him a "phrenologist" in the common meaning of that word, it is clear that he did have an interest in matters related to phrenology. This has been discussed briefly in Chapter IV. In the Spring of 1834, however, Warren used items from Spurzheim's collection in his lectures at Harvard. Thomas W. Ward, the administrator of Spurzheim's estate, wrote to Warren in April of that year:

> "I have your note 26 inst. [i.e., of 26 April] requesting loan of the heads and other articles belonging to the late Dr. Spurzheim which may be useful in your lectures at the university, and stating that you will be responsible for their safe return when called for."[53]

The boxes which Warren borrowed were Nos. 1, 2 and 3 listed in Walsh (n. 6) and for which Ward had Warren sign a receipt. In any case, Warren was either using the Spurzheim collection to lecture on phrenology--which is what I suspect--or, he was using it for ethnographical lectures. In May 1834, Ward wrote Warren again informing him that Seth Bass (see Walsh, n. 6) had delivered the boxes Warren had requested, and other

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[53]Thomas Wren Ward to John Collins Warren, 28 April 1834, Warren Papers 46 ("Spurzheim"), Massachusetts Historical Society, Boston.

drawings were to be recalled from Jonathan Barber and Henry Ware for Warren's use.[54] It is quite possible also that the perusal of Spurzheim's works, attendance at occasional BPS lectures, and assigned readings in the Annals of Phrenology became a part of the required course work for at least some of Harvard's medical students in the Spring of 1834. In one final respect, it might be noted, Warren was to do Spurzheim one better. Whereas Spurzheim modestly left his skull to humanity, Warren willed his whole body to Harvard "for dissection and for the preservation of his skeleton. The latter, gleamingly whitewashed, hangs today in the Warren Museum at Harvard."[55]

The Annals of Phrenology struggled on through a second and final volume of four numbers, the last of which appeared early in 1836. Thus the total run was eight numbers and it took almost three years to complete. But the Annals do have value from an historian's point of view; for, the "Notices" which it ran at the end of each issue gave an account of some of the activities of the BPS. We have no record therein, however, of the proceedings of the 1st Anniversary celebration of the founding of the BPS. It was a private affair, however, which took place on New Year's Eve, 31 December 1833, the agreed upon date for annual meetings. Furthermore, it was probably similar procedurally to

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[54]T. W. Ward to J. C. Warren, 1 May 1834, Ibid.

[55]Sullivan, p. 162.

later celebrations which will be mentioned momentarily.

The normal operations of the BPS continued through 1834. From the second number of the Annals (September 1834) we learn that the society held its regular meetings through the summer and were happy to report that they were attended with unabated interest. Another course of public lectures were scheduled for the fall session to begin October 3rd at the Masonic Temple. It was also announced that other societies had been formed at Hingham, South Reading, Amherst, Leicester, Worcester, Andover, and Hanover, Mass., Hanover, N. H. and Brunswick, Maine (cf. Chapter IV. on phrenology at Bowdoin). In 1834 also, the alienist Isaac Ray was actively interested in phrenology. He may now have been preparing his well known A Treatise on the Medical Jurisprudence of Insanity (Boston, 1838)--which he dedicated to the "phrenologist" Horace Mann[56]--, but of more interest for this narrative, in the Fall of 1834 Ray wrote a double review of works by Charles Caldwell and George Combe which eventually appeared anonymously in Volume 1, No. 3 of the Annals of Phrenology (pp. 372-390). Confirmation of this will be found in a letter from Ray to Capen, dated 25 September 1834.[57]

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[56]See A. A. Walsh, "George Combe: A Portrait of a Heretofore Generally Unknown Behaviorist," J. Hist. Behav. Sci. 7 (1971):269-278.

[57]I. Ray to N. Capen, 25 September 1834, Capen Papers, n. 10. Also see I. Ray to N. Capen in Ibid. dated simply "Eastport [Maine]--24, 1835."

In October 1834 an indication that the BPS was attaining an international reputation may be assumed from the fact that on the 17th and 20th day of that month, they received very formal communications from the "Universal Society for Civilization" in Paris wherein the BPS was requested, perhaps as the epitome of American Learned Societies, to provide information for the Paris group as to "The state of Sciences, letters and Arts in the part of the globe which you [the membership of the BPS] inhabit."[58] The Universal Society for Civilization planned to hold a Congress in September of 1835 at Paris and it was their desire that the BPS collect from all parts of North America--and perhaps beyond--all the particulars they could gather on the state of the social, medical, mathematical, and natural sciences, agriculture, commerce, factories, literature, music, the arts and drawing. Needless to say this was a monumental request. But beyond that, it indicates, as I suggested above, that the BPS was viewed as being the most appropriate scientific assemblage in North America to handle the matter. The BPS immediately formed a "very large committee" to attend to the request. Unfortunately, however, the Chairman of the committee was "called away on a philanthropic mission," and, when he returned he became ill, and the committee in charge was unable to respond to the Paris group until 28 July 1835.[59]

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[58] In the Fowle Papers, 17 October 1834, n. 38.

[59] William B. Fowle, John Flint, and Nahum Capen to the Universal Society for Civilization, Paris, 28 July 1835, Fowle Papers, n. 38.

Due to the Chairman's absence and subsequent indisposition the collection of papers from around the country did not occur, but the July communication--of five hand-written pages --did give a reasonably good summary of the state of affairs in the country in regard to the sciences and the arts. This manuscript may be seen in the Fowle Papers at the Massachusetts Historical Society in Boston.

The Second Anniversary of the Boston Phrenological Society was held in private like the first--on 31 December 1834 at Boylston Hall. The exercises included a Voluntary on the Organ, Prayer, Reading of the Scriptures, and, an "Original Ode," by I. McLellan entitled "On The Birth Day of Spurzheim." The text of this ode follows:

We bear no garlands now,
Twined for the victors brow,
   Nor song of praise!
To Glory's bloody hand,
To War's assembled band,
Scourge of both sea and land,
   No hymns we raise.

But o'er the noble head
Of the lamented dead,
   Our notes shall burst,
The laurel wreath we bind
in honor of the mind
In that pure frame enshrined,
   Now laid in dust!

Land of the golden vine,
Land of the lordly Rhine,
   Weep, distant land!
Weep for your son who came
Hither in learning's name,
Bearing her sacred flame
   In his pure hand.

His was the eye to scan
Clearly the mind of man,
   Through its dim night,
His the hand to unroll
Boldly the mystic scroll
Of the deep human soul
   --Making it bright.

His searching wisdom taught
How the high dome of thought
   Pictured the mind,
On that fair chart confest
Traced he each restless guest
Which in the human breast
   Lies deep enshrined.

But as Time's rolling wave
Sweeps o'er the stranger's grave
   Year after year,
Science shall watch his urn,
Pilgrims shall thither turn,
Beauty around shall mourn,
   Dropping the tear!

Following this solemn reading, an address was delivered by Rev. George Bradburn on the "Utility of Phrenology" followed in turn by a Hymn, Benediction, Voluntary, and the election of officers for 1835. John Pierpont was elected President for a third term, William B. Fowle replaced Jonathan Barber as Vice-President, Samuel Gridley Howe remained as Corresponding Secretary, M. S. Perry, M.D. replaced Nahum Capen as Recording Secretary, Joseph White became the new Treasurer, and E. P. Clark, Nahum Capen, J. F. Flagg, M.D., and John Flint, M.D. were the Councellors. N. B. Shurtleff and H. T. Tuckerman remained as Curators of the Society's collection.[60]

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[60] I have been unable to find a record of the officers for 1834. Pierpont was the first President of the BPS in 1833, and since he was President for 1835, I assume that he must have been President in 1834; however, the President for 1834 may have been Jonathan Barber, see n. 23, p. 120, and Annals of Phrenology 1 (1833-1834):399. Bradburns oration is reproduced in the latter source, 2 (1835):133-152.

Despite the difficulties the BPS was having with their journal, they announced at this time that

> The lectures of the Boston Phrenological Society, at the Masonic temple, continue to excite interest, and to be well attended. There is a lecture every Friday evening, at 7 o'clock [Italics mine].61

Furthermore, they announced that

> We take pleasure in stating that the collection of Casts, skulls and drawings . . . is gradually increasing . . . [and] An admirable bust of . . . [Spurzheim, that] distinguished philanthropist and philosopher, combining correctness and good taste, has lately been published under the direction of the . . . [BPS]. Any number can be procured by applying to Marsh, Capen and Lyon . . . This bust is true to nature, having been moulded from the living head in Paris, and although devoid of the beau ideal, is still elegant, and is therefore an useful and becoming ornament for the study or parlor.62

Not knowing at this time that their journal would cease publication a little over a year later, and, with the knowledge that their society had attained an international reputation, the BPS membership moved ahead with optimism into the middle years of the 1830's--in high spirits.

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61 Ibid.

62 Ibid., p. 528.

The Middle Years

The year 1835 got off to a good start for the BPS, and "scientific" phrenology as they understood it was advancing well. They perhaps could indentify with the prophetic words of Sir George S. MacKensie written in 1820. "The existence of the [phrenological] system depends on facts alone," he had then written, adding

> . . . and although it cannot yet be said to be perfect, it is in that state of forwardness, that we may soon expect a rapid approach to its establishment as a science.[63]

But during this same middle period, the real eventual heirs of Spurzheim's mantle in this country were slowly developing their own form of practical phrenology--examining heads for a fee--and developing a veritable phrenological and reformational dynasty. Orson and Lorenzo Fowler were mainly responsible for this type of "non-scientific" approach--but they were not alone. Their interpretation of what practical phrenology was differed considerably from the BPS's interpretation insofar as the latter assemblage took practical to mean applied for the specific purpose of "scientific" investigation and the ultimate amelioration of mankind--not applied as a form of entertainment and for remuneration.[64]

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[63] G. S. MacKensie, Illustrations of Phrenology (Edinburgh, 1820), p. 273.

[64] See e.g., M. Stern, Heads and Headlines: The Phrenological Fowlers (Norman, Okla., 1971) and this writer's review of this work, J. Hist. Behav. Sci. 8 (1972):438-441.

In the first number of the second volume of the Annals (May 1835) the editors felt obliged to take notice of the problem.

> While we congratulate the lovers of truth on the spread of Phrenological Science, [they wrote,] we should be wanting in our duty to the subject, were we to neglect noticing, occasionally, the obstacles which its indiscrete friends throw in the way of its progress. We speak it in kindness to those who may be the subjects of our remarks--that there may be many abroad teaching the public phrenology, and making application of its principles--who stand in eminent need of instruction themselves . . . We cannot sanction the teachings of one, from whatever motive he may act, who has not thoroughly prepared himself for the task which he undertakes. Phrenology is a new science . . . [rendering] the task of lecturing upon it difficult.
>
> The most prevailing evil . . . is the practice of examining heads; not of well-chosen cases, where examinations may be of use to the science, but indiscriminately. Every head, whether common or uncommon, respectable or degraded, receives a formal judgment . . . there [even] are individuals who make it their business, have their shops, and receive pay for their manipulations, so much per head! This practice not only degrades the science, but gives rise to superficial converts, who will be likely to prove obstinate followers of the bad examples which were the means of their conviction. It turns a dignified science into a system of legerdemain, and those who are really able to promote the true philosophy of man will be prevented from investigating the subject on account of the repulsive appearance of its exterior . . . we are told that many dispute the truth of our doctrines and set us at defiance. Let it be so. When demands are made for the proofs upon which our science stands, let them be answered by stating what its principles are, and how sustained--rather than in showing what phrenologists can do . . . we are decidedly opposed to that system of observing human nature which mistakes the means for the end of science, and which tells to the world its discoveries before they are matured . . . We entreat . . . [these individuals] to desist, and to aid in promoting Phrenology in a way more in accordance with scientific taste.

But the problem was not to be reduced. The American public clearly preferred the side-show type of phrenology and it was that type which ultimately survived. In 1835, however, the problem of the seeming ubiquity of practical phrenologists was not envisioned by the BPS as in the ascendent. They persisted, therefore, with their scientific methodical gathering of phrenological data, improving their collection, and educating the more rational members of the community.

Sometime late in 1835, BPS Counselor Nahum Capen went to Europe. Traveling between France and England until 1836, he was to associate during his stay there with many prominent scientists of the age, e.g., Sir James Clark, Andrew Carmichael, Richard Cobden, John Elliotson, Sir Charles Bell, and Sir George MacKensie. His trip, no doubt, was a combined one for pleasure and phrenological business.

In the meantime, Capen's fellow phrenologists in Boston were keeping active. On 28 February 1835 the BPS Recording Secretary, Dr. M. S. Perry, wrote to Vice-President Fowle that at the last meeting of the Council, it was thought prudent for the Committee on Publications to authorize a premium of one hundred dollars for the best anti-phrenological essay, the merits of which would be judged by a committee of gentlemen who were opposed to the doctrine of phrenology. In the spirit of induction, this ostensibly would bring in evidence on the negative regarding the truthfulness of phrenological theory. In any case, a copy of the announcement which was eventually published is in the Fowle Papers

at the Massachusetts Historical Society (dated 20 July 1835) --apparently in Fowle's handwriting.[65] The notice appeared in the August 1835 issue of the Annals with a request for "Editors of [other] papers friendly to the cause of science" to copy the notice in their publications. According to Capen, "This offer was announced in 1835, 1836, and 1837, but no one was ambitious to compete for the prize."[66]

During 1835, the BPS acquired new rooms on the lower floor of the Masonic Temple. Strangers who wished to examine their collection of skulls and casts were required to apply to either the Curators or Members of council for admission--but, they were welcome. The collection at this time numbered nearly five hundred items "illustrative of all the principles of practical phrenology." A small library was also maintained. In 1835 also, the Society authorized the publication of A Catalogue of Phrenological Specimens (Boston: Ford) in their collection. They had acquired by this time, the items Spurzheim brought to America, part of the collection of J. D. Holm of London, and as was mentioned earlier, they were actively adding to it on their own. In addition, the reader will recall, they had purchased additional casts from London which must have arrived by this time. A collection of nearly five hundred items was of good size. For,

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[65]As is the letter from Perry, 28 February 1835, Fowle Papers, n. 38.

[66]Capen, Reminiscences, p. 123.

Hollander has noted that in 1836 the Edinburgh Phrenological Society (aet. 14 years) had a collection of 463 skulls, 280 busts, and 100 masks (totalling 843 items); the London Phrenological Society (aet. 12 years) had 300 to 400 specimens; and, that Spurzheim at one time personally owned 800 to 900 masks and busts and J. D. Holm 300 to 400.[67] In addition to the five hundred or so items in the BPS's museum, the society had in its collection its most precious relics, the skull and brain of Spurzheim. They did not formally store them in a safe in these rooms until around March of 1835 however, when, for some reason, it became necessary for a vote of Council to procure them from William B. Fowle, who perhaps had hoarded them hoping to go unnoticed. A letter to him dated 18 March 1835 from the Society's Curators formally addressed itself to this issue. Dr. Winslow Lewis retained Spurzheim's heart until 5 June 1850 at which time he sent it to John Collins Warren.[68] But there were two interesting events which occurred around this time that not only reconfirmed for the membership of the BPS the soundness of their belief in phrenology, but indicated that phrenology was at last joining the ranks of recognized science.

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[67] B. Hollander, In Search of the Soul and the Mechanism of Thought Emotion and Conduct 2 vols. (New York, 1920) 1:357.

[68] Fowle Papers, n. 38, and, J. C. Warren, "The Collection of the Boston Phrenological Society--A Retrospect," Annals Med. Hist. 3 (1921):9.

On 22 January 1832 L. W. Belden, M.D. read a paper before the Springfield, Massachusetts Lyceum entitled An Account of Jane C. Rider, the Springfield Somnambulist (Springfield, 1834). The "singular affection" of which this girl was subject had made its first appearance on 24 June 1833. Her various "paroxysms," as they were called, which occurred at sporadic intervals, were not only intriguing to the medical profession in general (during her absent minded states she would perform a variety of curious acts after which she would be amnesic), but afforded the opportunity for phrenologists to obtain more data confirming their principles. In Jane's case, for example, it was noted that

> A small spot on the left side of her head, near the region which the phrenologists assign to the organ of marvellousness, . . . [had], since her earliest recollection, been tender or painful on pressure, and the sensibility is much increased when she suffers from headache.[69]

From a phrenologist's point of view, cerebral inflammation was indicated and this would therefore account for some of her odd behavior. Her case was brought to the attention of the alienist Samuel B. Woodward, M.D. when Jane was taken to the Worcester Massachusetts State Hospital in December of 1833. On 14 January 1834 Woodward wrote to Belden analyzing her case. He concluded therein

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[69]L. W. Belden, "An Account of Jane C. Rider, The Springfield Somnambulist," Bost. Med. Surg. J. 11 (1834): 53-84.

> With respect to the theory of this interesting case, I am confirmed in my first impression of the rationale of the symptoms [:] acuteness of vision to an astonishing degree and of memory of early impressions . . .[Phrenologically, she exhibited] a morbid manifestation of the faculty of time and tune, so that she could sing accurately and agreeably although she can do neither in her ordinary state of health, this is settling the matter at a sweep, I am sensible; but yet it appears to be philosophically done.[70]

On Wednesday, 10 September 1834, an account of the case, phrenological remarks and all, appeared in the Boston Medical and Surgical Journal (n. 69). In November of 1834 Woodward was in communication with Nahum Capen regarding--it is expected--Capen's queries of him in respect to phrenology and insanity. In his reply, Woodward comments on Rider, adds his views on phrenology, and makes the following remarks regarding Jane and the insane in general:

> "I should think that two facts would impress a phrenologist when passing through our halls [the halls of the Worcester State Hospital]: one, is the very great number of patients who have [the phrenological faculties of] Ideality, and Wonder, in disproportion to other organs; another is, the very frequent, not to say general defects, of the perceptive organs . . . [In regard to monomania in particular,] I know not how to account for the symptons of monomania in any other way than by supposing some [phrenological] organs diseased, and others more or less sound. In this sense almost all the insane are monomaniacs

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[70]In L. W. Belden, An Account of Jane C. Rider, The Springfield Somnambulist (Springfield, 1834), pp. 90-91.

> very few have all the faculties equally affected."[71]

Belden's conclusion regarding the Rider case--a conclusion no doubt eagerly read and accepted by the members of the BPS was that

> . . . The facts brought to light in this and other analagous cases . . . go very far towards establishing the fundamental principles [which phrenology teaches] that the mind acts by separate, and to a certain extent, independent organs.[72]

But the very special case that was to convince the BPS--and others no doubt--that phrenology was advancing as a "science" (and was being recognized as such by the community at large) involved an interesting series of events in Durham, Maine, a small town about twenty miles from Portland.

Sometime in June of 1834, a young boy by the name of Major Mitchell (aet. 9 years, 19 March 1834) from Durham, Maine--the illegitimate son of a woman named Plummer (described as being ignorant, poor and degraded)--violently attacked a boy by the name of David Crawford (aged 7 or 8 years) subsequent to meeting him at his School House on a Monday morning. The events which followed that meeting were recorded in the boy's "confession" elicited after his arrest. His personal statement, moreover, was published, and it read, although somewhat disjointedly, as follows:

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[71]The text from this letter is reproduced in the Annals of Phrenology (1835):34-36. The comments on monomania were added by Woodward after his perusal of proof sheets for the text of the article in which his letter was to be reproduced. This addition is contained in S. B. Woodward to N. Capen, 6 April, 1835, Capen Papers, n. 10 and in the Annals, Ibid., p. 36.

[72]Belden, n. 70, p. 126.

There being no school, he [i.e., Mitchell] persuaded David to go into a pasture near, where he intended to whip and kill him--on what account he cannot tell. (School ma'am was ill, and there was no school. She told them to bow when they went out; the others would not bow, and when he did, they made fun of him, laughed at him, and struck him. He never had a quarrel with David nor with any body else; never stole anything; never killed anything--had a dog once, which father would hang on account of his old age, though he, the boy, did not want to have him put to death for what he could not help.) Feeling no particular animosity excited, he at first concluded to let him go home without whipping him; but soon vexed David somehow, so that he, David, called him names. Says, 'he called me a hog, a fool, and a stealer.' He now began whipping David with his fists; intended to kill him, and should have done it had he not been prevented by Jacob Macintosh (Zeke Macintosh) a man who interfered and detained him awhile, and sent David home by another way. Says he was soon set at liberty, and overtook David in the road, and prevailed on him (by threats to lick him if he did not go, and by promises that he should not be hurt, if he would go) to two or three rods into the woods, where, he says (I put him into the water with his clothes on, and kept him there ten minutes, trying to drown him,) I filled his mouth with leaves and brakes, (mud and brakes and ivory leaves and birch leaves;) I then pulled his clothes all off. I tied his hands to the trees with withes, and tied his legs with his suspenders. * * * * * * * * I then beat him with sticks on his naked body for five hours, (from morning, till four, p. m.) I struck him five hundred times--frequently brought blood. He appeared quite weak. I then untied him, and held him under water, (face down,) as near as I could judge, eight minutes, (and finding the water too shallow, only ancle deep, I built a dam.) It was some time after I took him out of the water, before he could speak. I did not dare to kill him, because I was afraid Jacob Mackintosh (Zeke) would find me out. (I told him he might go; and he went toward his clothes, and I thought he got them.) He was three hours getting home. He went home naked. I supposed he would find his clothes: He was confined two days, and had the doctor. (I felt sorry, and do now--I thought of God all the time.) I did not pity him till I was taken up; I had often played with David, but never

> quarrelled with him. (I saw him once afterwards, three or four days before I was taken up.) I have been to school some part of the time for three years; I began at six; cannot read at all. (Spells in one syllable.) Mother does not know how to read. Father died three years ago. I have been whipped often by father and mother [sic].[73]

What did not come out in this confession but eventually did come out at Mitchell's trial was that Mitchell had partly emasculated Crawford on one side with a piece of tin--requiring Crawford to "go look for that thing" which he had apparently discarded in the woods.[74]

The case of Major Mitchell became a sensation in the press and his trial attracted a great deal of public attention. Although not on the magnitude of the notorious murder of Dr. George Parkman in 1849 (n. 52), the case of Major Mitchell was viewed as being particularly heinous due to the boy's youth. The case, furthermore, attracted the attention of the famous writer and editor of the New England Galaxy, John Neal (1798-1876),[75] a "decided phrenologist," who defended Mitchell and ultimately published a complete account of the case seriatim in his paper--commencing 17 January 1835 (see n. 73). Neal's account ran for five issues of that paper and comprised almost three complete tightly-printed columns per issue. He felt compelled to publish it

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[73]Reproduced in part in Annals of Phrenology 2 (November, 1835):303-309, but in its greatest detail by John Neal, in the New England Galaxy, 17 January, 24 January, 31 January, 7 February, and 14 February, 1835.

[74]Ibid., 31 January 1835.

[75]American Biography, 13:398-399 (see n. 1, Chapter V).

so he told his readers, since all the previously published reports of the trial--in his estimation--were erroneous. A very much abridged account was published in the Annals of Phrenology the following November (see n. 73). Neal's reporting of the case did not involve simply a rehash of what others had printed. Since he was personally involved in the trial on the defense, he conducted his own investigation, interviewed the boy himself of course--in one instance with Isaac Ray--had a cast of Mitchell's head taken in plaster by "the establishment of Michelluccini & Co.," of Boston (who he reports were at that time [1835] employed by the BPS), and published the phrenological measurements of the boy's head.

Neal's main concern was the fact that while the boy might be determined to have "enough capacity" to know right from wrong to satisfy the court, he did not have enough to satisfy Neal. One must realize that the medical jurisprudence of insanity was not clearly understood at this point in time. Isaac Ray's work on this subject did not appear until 1838. Ray was prompted to publish that work, he stated, since he concluded that "the English language" had not furnished "a single work in which the various forms and degrees of mental derangement are treated in reference to the effect on the rights and duties of man."[76] In 1834,

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[76] I. Ray, A Treatise on the Medical Jurisprudence of Insanity (Boston, 1838), pp. 5-6.

therefore, medical jurisprudence in relation to crimes of violence might be said to have been legally open-ended insofar as there were few guiding principles to direct the courts. Spurzheim had dealt with this topic in his work on insanity (see Chapter III), but in the case of Major Mitchell, Neal had little to rely on.

What Neal hoped to do in his handling of the case of the "Durham boy" was to prove that an injury which the boy suffered early in life so disrupted the functioning of his brain that it could account for the boy's acts and free him from responsibility under the law. "Believing . . . that there was a good foundation to proceed upon," Neal wrote,

> I determined to introduce a new question of Medical jurisprudence; and being satisfied that I could prove the injury to the child's head, or render it probable by the testimony of medical men, that it [the child's head and brain] had sustained an injury; or that there was a malformation of the head; or that the remarkable want of symmetry, (one ear being higher than the other, and the developments of [the phrenological organs of] Destructiveness and Secretiveness considerably larger on that side) indicated something doubtful as to the healthy condition of the brain, being satisfied, I say, that if I could do any of these four things, I should be able to introduce Phrenology, for the first time, into a Court of Justice, and obtain the responses of her priesthood upon oath, I prepared for trial with these three leading objects in view--the Discovery of Truth--the Promotion of Justice--and the enlargement of Legal Science [Italics mine].77

The aforementioned brief account should give the

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[77]Neal, 31 January 1835.

reader sufficient information to draw his own conclusions regarding the import of these proceedings in regard to phrenology and the BPS. It should not be too difficult to understand that if phrenology were introduced into a court of law without a snicker, that, if testimony based on phrenological theory should be presented by competent rational men, that this happenstance would clearly indicate to the world (or to Americans anyway) that phrenology was no longer deserving of calumny and vituperiation. I plan to give a more detailed account of this case at a more appropriate time, since I have the good fortune to possess an original cast of Mitchell's head in my own collection. Be that as it may, it should be recorded here to conclude, that the boy Mitchell was found guilty on two counts--"one for Mayhem, including a felonious assault with intent, &c.; the other for an aggravated assault and battery with wounding &c."--and sentenced to nine years of hard labor and imprisonment at Thomaston, Maine.[78] Although Neal was unable to win his case, he did succeed in introducing for (as far as I can tell) the first time in a court of law evidence based on phrenological tenets, as given by witnesses who acknowledged their belief in "phrenological science."

The Annals of Phrenology, when presenting their account of Neal's activities, admired his "zeal and exertions . . . as counsel for this friendless boy." They expressed

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[78] Ibid.

the feeling, however, that they would have preferred a "better case" for the introduction of phrenology, "into the dark passages of criminal law." They would have, preferred, that is, for the first case to be won--not lost. If the case were won, they continued, it "would have afforded an opportunity for a triumphant vindication of its [phrenology's] utility, and an augury of its future stupendous influence." But it has been introduced, they implied, and phrenological science is therefore advancing nonetheless.[79]

We have from the year 1835 the only printed account of the activities of the BPS. The proceedings for that year were prepared by the recording-secretary, J. S. Sleeper and were published in the final number of the Annals as "a Report (unofficial) read to the Society, January 14, 1836." It is reproduced in its entirety as Appendix F. A perusal of that Appendix shows that for the most part, the society's meetings during that year consisted of reports or papers read by individual researchers, letters from foreign correspondents, and the like. Happily, Sleeper was able to report also that several animated discussions took place that year among the members, "on questions proposed for debate by the Executive Committee." All seemed well. Unfortunately, however, the number of "ignorant pretenders" who had only a superficial knowledge of phrenological science continued to increase--even though the BPS believed that the blunders

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[79] Annals, n. 73, pp. 308-309.

of quacks provided no argument against any science, phrenology included.

On 28 December 1835 the third anniversary of the BPS was celebrated at the "Odeon of the Boston Academy of Music." Why it was not held on the 31st of December must remain obscure. The ceremonies were public on this occasion --the first time since 31 December 1832--and had the same degree of solemnity as earlier celebrations. Prayers were recited another memorial poem read in

> Tribute to the memory of Spurzheim the advocate of virtue, the CHRISTIAN--who now sleeps so quietly and beautiful, beneath the shades of Mount Auburn.80

Samuel Gridley Howe addressed the assemblage this year, reflecting again the society's concern with the increasing ubiquity of itinerant phrenologists. "Phrenology has no worse enemies," he told his audience,

> than those sophomores and blue stockings, who run about applying their calipers, or their fingers to their neighbor's heads, and pronouncing upon their dispositions [one is reminded here of the "cocktail party psychologist" syndrome]; a few successful hits give them an authority in the little social orbits, where they shine as stars of great magnitude; their friends begin to examine Phrenology--the blue swells into importance--her decisions are pronounced in an oracular manner; she becomes a sort of prophetess, and at every party, heads bow before her, until she pronounces some mooncalf to be a genius, some coward to be a hero, or some poet to be a dolt,--when, without ado, the pythoness is scouted, her tripod is overset, and unable to recover from her defeat or to explain its cause, she is laughed at: Phrenology shares in the ridicule, and can

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80 Ibid. 2 (1835):508.

> never be mentioned without bringing up the recollections of her discomfiture.81

What then did constitute an "intelligent" and "trustworthy" phrenologist for the BPS? For them

> To constitute an intelligent and trustworthy practical phrenologist, a long course of study and observation, as well as a natural capability of profiting by these, is indispensably requisite. He [an intelligent and trustworthy phrenologist] must have an intimate acquaintance with the cerebral development of numerous individuals, and ample opportunity of observing the dispositions and talents connected with each; --he must be able to recognise with facility the degrees of development of the various organs, and also the temperament of the subject before him;--he must know accurately the functions of each organ, both individually and in combination with others;--his stock of general information must be respectable, that he may understand the nature of the sciences and occupations, to the pursuit of which the different faculties prompt; --and he must render himself familiar with human nature in its various phases, by mixing extensively with men of different ranks and employments, and by a careful study of biography. Finally, such a degree of reflective power as gives perception of motives is necessary to the observer; for it is a fact, revealed by Phrenology, that persons in whom the reflective faculties are weak, do not clearly perceive causation either in morals or in physics, such persons see actions only as occurrences, and are blind to the motives which produce them. They are the loudest scoffers at Phrenology, and are excusable in every respect for being so.82

On 1 January 1836 the BPS elected new officers for the year. William B. Fowle, who apparently did not attend that meeting was elected President. New curators were

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81 S. G. Howe, An Address Delivered at the Anniversary Celebration of the Boston Phrenological Society, December 28th, 1835 (Boston, 1836), p. 8.

82 Annals of Phrenology 2 (1835):379-380.

appointed, a new Vice-President elected, and Samuel Gridley Howe remained as Corresponding Secretary.[83] In addition, the society issued a new work to serve as a "Pocket Companion" to help students of phrenology. This work was attributed to Nathaniel B. Shurtleff and was entitled An Epitome of Phrenology (Boston, 1835). In addition, a special "Phrenological Chart" was prepared and a brass "Cephalameter" constructed for use by the BPS Membership--approved by the Executive Board. The latter instrument was designed to take the place of the calipers and "craniometers" which were apparently then in use. However, with the cessation of publication of the Annals after Volume 2, Number 4 which appeared in print early in January, 1836, other and later activities of the society become more obscure.

At the beginning of 1836, membership in the BPS numbered one-hundred and twenty-seven. Presumably the meetings were proceeding as usual every two weeks, and presumably the membership attended regularly. It is unfortunate that the membership did not support the Annals; for, there appears to be no other immediate reason for its cessation except lack of support. But there were other things to do in 1836, one of which involved assisting George Combe in his candidacy in Edinburgh. During this year, George Combe declared himself a candidate for the "Chair of Logic" at

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[83] A list of the officers for 1836 appears in the Annals of Phrenology 2 (1835):511. Fowle received his notice of election from J. S. Sleeper, 2 January 1836. See Fowle Papers, Sleeper to Fowle, 2 January 1836, n. 38.

Edinburgh University. As the titular head of phrenology at that time, it would have been a fine appointment to attain not only for Combe personally, but for phrenology as a "science." It is unfortunate that he competed that year with Sir William Hamilton; for, with such formidable competition he had little chance of success. In any case, hoping for success, Combe solicited testimonials in his behalf from the scientific community around the world, and the BPS--particularly Nahum Capen--collected testimonials from him in the States.[84] Testimonials were collected from, for example, Benjamin Silliman and Charles H. Stedman to name two. John Collins Warren in his testimonial for Combe wrote

> . . . .Mr. Combe's works are highly esteemed here, and have been productive of real improvement in intellectual and physical culture.[85]

Other testimonials may be seen in the Capen Papers at Harvard (n. 10), and in G. Combe, Testimonials on Behalf of George Combe (Edinburgh, 1836).

In addition to the society's concern for Combe, they kept their lecture schedule functioning as usual. Regular lecturers during 1836 included, for example, John Pierpont, Jonathan Barber, J. D. Green, Samuel Gridley Howe, J. D. Fisher, J. F. Flagg, and Nahum Capen who all repeated lectures

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[84]On Combe's competition for this chair, see A. C. Grant, "George Combe and the 1836 Election for the Edinburgh University Chair of Logic," Book Old Edinburgh Club 32 (1966):174-184.

[85]J. C. Warren to N. Capen, 3 June 1836, Capen Papers, n. 10.

they had given in 1834.[86] In addition, lectures on the anatomy of the brain were given by William Ingalls, M.D. who also delivered lectures on the harmony of phrenology and religion. Ingall's published his lecture at a later date, as did Samuel Gridley Howe, although the latter alone contains the inscription "published at the request of the society."[87]

Toward the end of 1836, Samuel Gridley Howe's activities as corresponding secretary seem to have begun. But, there is little to be found in Howe's correspondence at Harvard related to phrenology although some later correspondence of his with George Combe is extant in the Perkins School in Watertown, Mass.[88] In the archives at Harvard, however, is a copy of Howe's form-letter ostensibly used in his correspondence to foreign dignitaries notifying them of their election to Honorary Membership in the BPS. The letter is dated 30 December 1836.[89] It does not seem probable to this writer that the society waited so long to engage in the practice of electing foreign dignitaries to membership. What may have been the case, however, is that during the early

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[86]Capen, Reminiscences, p. 123.

[87]See e.g., Ibid. and W. Ingalls, A Lecture on the Subject of Phrenology not Opposed to the Principles of Religion; nor the Precepts of Christianity (Boston, 1839), and S. G. Howe, A Discourse on the Social Relations of Man; Delivered Before the Boston Phrenological Society, at the Close of Their Course of Lectures (Boston, 1837). A copy of this rare edition is located at the Perkins School, Watertown, Mass.

[88]Samuel Gridley Howe Papers, Call no. MSAM-314, et al., Houghton Library, Harvard University, Boston.

[89]Ibid., Letter No. 839.

years of the Society's existence they elected corresponding members only, and when it seemed advisable to increase (or improve) their "status," a decision was made to seek out honorary members to add to their ranks. Since the letter is dated the same day as the day on which the society held its 4th Anniversary celebration in 1836 the letter may have been submitted by Howe for Executive Board and/or membership approval. The text of that letter follows:

"Phrenological Society's
"Room Boston December 30, 1836

"Sir,

"I have the honor of informing you that the Boston Phrenological Society has elected you one of its Honorary Members.

"The society now consists of about one hundred members; possesses a good cabinet; and though yet young and feeble is, I trust animated by that spirit of zeal, which when executed in the cause of truth, never fails to bring forth good.

"Several other societies are springing up in different parts of the country; and I am happy to say, there is not a state of our Union without warm and able advocates of phrenology. It is the aim of the Boston Phrenological Society to acquire and disseminate as much knowledge of the science as is possible with its limited means.

"It must look to Europe for much of its light for some time to come; it is desirous of opening a correspondence with the most eminent phrenologists there; and I would be highly honored by any communications from you.

"With great respect
Yours
"Samuel G. Howe"
"Cor. Sec. B. P. S. [Italics mine]"[90]

It seems particularly curious to this writer that after four

[90]Ibid.

year's existence, after gathering and disseminating a great deal of phrenological data, and, after being called upon for years as the "leading society in the United States,"[91] there is still that suggestion of European dependence in Howe's letter. It indicates most certainly the feelings of inadequacy on the part of American phrenologists, if not American science in general during that era. The failure of the Annals which ended in 1836, however, would make Americans' dependent on the European journals in any case. Despite this, however, we are told that Howe's letters were all "characterized by the intelligent zeal and good judgment of the[ir] distinguished author."[92] Among the "Honorary Members" of the BPS at various times were Sir George S. MacKensie, George Combe, Andrew Combe, M.D., "Prof. L. V. de Simoni, Rio Janeiro [sic]," J. F. Blumenbach, Gabriel Andral, Felix Voisin, Francois-J.V. Broussais, and J. Roberton. Other interesting members were William O. Ellis, director of Hanwell, the county Asylum in Middlesex, England,[93] and the father of Sir James Chrichton Browne, Dr. W. A. F. Browne.[94] But despite the fact that the BPS may

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[91]Capen, Reminiscences, p. 123.

[92]Ibid., p. 124.

[93]W. C. Ellis to S. G. Howe, Capen Papers, 17 July 1837, n. 10. See also, D. Leigh, The Historical Development of British Psychiatry (New York, 1961), p. 222.

[94]W. A. F. Browne to Samuel Gridley Howe, 8 December 1837, Capen Papers, n. 10.

have still looked to Europe for guidance, they seem to have become convinced that phrenology was entitled to be ranked among the sciences. That is, they believed, or in any event, the BPS and others behaved as if they believed, that phrenology was a branch of knowledge or study, dealing with a body of facts systematically arranged, and that it showed the operation of certain general laws so-called--i.e., it was a science in the common meaning of that term. Despite this, the BPS was still cautious. They did not believe that phrenology was perfect--it was attended with some difficulties. In his address to the Society on 30 December 1836, James D. Green summarized this attitude thusly:

> Gentlemen of the Phrenological Society, you feel, I trust, the firmness of the ground, on which you stand. You recognize the claims which phrenology presents to be received as an established science;--as the true philosophy of human nature. You do not pretend by this, however, that you regard it as a perfect system. It would be most extraordinary; it would be an anomaly in the history of science, if it were. It was never so pretended by either of its great founders. They acknowledged that there were parts which needed further observation. It is not wholly unattended with difficulties; and what great subject is? . . . However incomplete the science may yet be, it has established principles, which will constitute as we believe, an epoch in the history of man . . . On the ground of its own evidence, and not upon the strength of numbers or of names, you also, Gentlemen, have embraced it; and you behold in it the true exposition of the varied phenomena of the human mind . . . Like . . . [Spurzheim], you profess to be the students of human nature . . . Adhere to the great principle of your master, the principle of indictive inquiry, as the basis of all your scientific investigation. You will not, then, receive, by a blind and implicit deference to authority, what he or any other may have taught; but, by personal

observation, you will seek for personal conviction.[95]

The year 1837 found Samuel Gridley Howe at the helm of the BPS as its President. Howe became active early in the year when he began to communicate with principles in Washington concerning a planned scientific exploratory expedition to the South Seas under the auspices of the Department of the Navy. His and the Society's interests were to have attached to the corps of scientists someone capable of gathering phrenological data. In March of 1837 I. A. Reynolds wrote President Howe that "the corps will be an organized body, and as such can take charge of the Scientific inquiries in behalf of which, your society has so deep an interest."[96] Reynolds then referred Howe's letter to Reynell Coates--comparative anatomist to the expedition--who wrote Howe from Philadelphia on 6 February 1838 that

> . . . it gives me great pleasure to assure you that no exertion on my part will be spared in endeavoring to advance the interest of the science [of phrenology] for the cultivation of which your Institution [sic] has been established.[97]

Coates assured Howe that facilities for obtaining casts would be provided, and that some works on phrenology--for the expeditions "phrenological library"--had been obtained from the government. How much the BPS actually obtained from

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[95] J. D. Green, An Address Delivered at the Anniversary Celebration of the Birth of Spurzheim, and the Organization of the Boston Phrenological Society, December 30, 1836 (Boston, 1837), pp. 20-21, 27.

[96] J. A. Reynolds to S. G. Howe, 27 March 1837, Capen Papers, n. 10.

[97] Ibid., Coates to Howe, 6 February 1838.

this proposed venture--if anything--is not known.

Earlier, however, on 24 January 1836, Thomas Sewall of "The Columbian College, District of Columbia"--a disbeliever in phrenology--, was continuing his efforts to disprove phrenology's claims. He wrote John Collins Warren on that date requesting the loan of a skull "of the greatest thickness" in order that he, Sewall, can "make good use of it in putting down this mischievous doctrine."[98] Whether or not Warren actually sent the skull is not known. According to Davies, Sewall used a pathological skull from Spurzheim's own collection to prove one of his points in a subsequently published work.[99] Warren may have arranged for Sewall to obtain this if Davies' remark is factual. In any case, it is instructive to learn that Sewall saw Warren then as perhaps one who would want to see "mischevious" phrenology put down. In 1838, however, Sewall wrote Warren again for an endorsement and for the names of others similarly inclined against phrenology for the second edition of the aforementioned work based on Sewall's labors in 1836 and 1837. Warren's endorsement is not found in the frontspiece of that edition where others are listed.[100] The work

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[98]Thomas Sewall to J. C. Warren, 24 January 1836, Warren Papers 17 ("July 1834-1836"), Massachusetts Historical Society, Boston.

[99]Davies, p. 142.

[100]Thomas Sewall to J. C. Warren, 20 December 1838, Warren Papers 19, Massachusetts Historical Society, Boston, and T. Sewall, An Examination of Phrenology in Two Lectures, 2nd ed. (Boston, 1839).

which I alluded to which was considered by anti-phrenologists as phrenology's coup de grace was based on two lectures delivered by Sewall at his college in February of 1837. These were published as a pamphlet that year and again in 1839 as An Examination of Phrenology in Two Lectures with the inscription "Errors of Phrenology Exposed" emblazoned on the front of the cover (n. 100).

When Sewall's work appeared it attracted wide attention in the press. The Boston Medical and Surgical Journal, however, simply published a summary of the contents of the work with no evaluation of it.[101] G. S. Patterson and Robley Dunglison, Editors of the American Medical Library and Intelligencer wrote a generally favorable review, while John Bell, Editor of the Eclectic Journal of Medicine was decidedly negative:[102] The American Journal of the Medical Sciences praised the work (August, 1837). Davies contended that Sewall's examination of phrenology was one of the few inquiries of the period that might be considered scientific and temperate.[103] Although I would agree that Sewall attempted to disprove scientific phrenology on its own grounds, he was far from being alone in the "scientific" investigation of phrenology's tenets. Although Sewall's arguments are too detailed to be discussed at length here, his

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[101] 17 (August, 1837):53-55.

[102] 1 (1837-1838):76-77, and 1:(1836-1837):340-354 respectively.

[103] Davies, p. 141.

work was highly influential and most certainly had a deleterious effect on the BPS and phrenology's status in this country. "His critique concentrates on five points of objection," Davies wrote, viz.,

> 1. the formation of the brain does not reveal upon dissection any division into organs or compartments;
>
> 2. there is no necessary and unvarying relationship between the volume of the brain and the powers of intelligence;
>
> 3. because of the varying thickness of the cranial bones, it is impossible . . . to determine the volume of the brain;
>
> 4. because of the frontal sinuses and the unpredictable depth of the cranial bones, the degree of the development of these various organs, even supposing that they exist, cannot be ascertained; and,
>
> 5. when an area of the brain is injured or destroyed, the faculty which is supposed to reside there is not correspondingly impaired.[104]

Of the five points made by Sewall, it should be noted that the last one was eventually proved to be entirely true; however, in 1901 Bernard Hollander published a work in which he cited eight hundred cases of localized brain derangements gleaned from the medical literature ostensibly proving that point five was erroneous.[105] In regard to the other four points, however, phrenologists never contended that the converse of them was always true. In regard to point two furthermore, the reader should recheck Spitzka's work

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[104] Ibid.

[105] B. Hollander, The Mental Functions of the Brain (New York, 1901).

discussed in Chapter IV which does support the antithesis.

Before the second edition of Sewall's work was published, none other than Charles Caldwell came forward as phrenology's defender. In April of 1838, subsequent to a series of lectures attacking Sewall given by Caldwell in New York, Caldwell published--under the auspices of the New York Phrenological Society--his Phrenology Vindicated and Antiphrenology Unmasked (New York, 1838). The Boston Medical and Surgical Journal characterized this production from Caldwell's controversialist pen as that "thorough-going escarotic mixture of words" whose purpose seems to be nothing less than the "utter professional annihilation" of Dr. Sewall. Discreetly, however, the journal added

> Happily we cannot discover who is right or who is wrong in the affair--and, what is personally very comforting, we shall neither glory in the triumph of the one, or mourn over the downfall of the other.[106]

In a later issue of the Boston journal, an article signed simply "**W" (John Collins Warren?) came to Sewall's defense.[107] In the second edition of Sewall's work, he was able to include endorsements from none other than Daniel Webster and John Quincy Adams. But although the phrenological world was shaken by this attack of Sewall's, and no doubt convinced a few BPS members to resign, the BPS and phrenology did not desist in its efforts. "To the dispassionate mind, Dr.

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[106] 19 (1838):127.

[107] Boston Med. Surg. J. 19 (1838):203-207.

Sewall had failed to annihilate phrenology,"[108] and looking toward 1838 with optimism, the prominent physician Elisha Bartlett--immortalized in Sir William Osler's An Alabama Student--addressed the BPS at the close of their fifth year.[109] On that occasion Bartlett told his auditors

> All true science is of slow growth . . . Especially is this the case with all knowledge which is the result of experiment and observation. Through a slow, irregularly moving and progressive process, have all the natural sciences [--phrenology included--] been obliged to pass . . . Phrenology, in so far as it claims to have demonstrated the existence of a multiplicity of cerebral organs, each concerned in the manifestation of a primary and elemental faculty or power of the mind, must rest for support, singly and exclusively, on observation. The truth of this fundamental proposition of the science, we believe, has been so established . . . the opposers of phrenology [,however,] have, for the most part, overlooked or misapprehended this fact; and that they have, instead of endeavoring to controvert the alleged results of observation, in the only way in which such results can be controverted, by counter observation, resorted to reasoning or to speculation, based only upon certain gratuitous and assumed premises, or, as has been more commonly the case, to misrepresentation and ridicule . . . If Phrenology . . . is what it pretends to be, it must also, like its sister sciences, show itself directly instrumental in promoting the best interests of the human race.[110]

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[108] Davies, p. 142.

[109] Sir William Osler, An Alabama Student (London, 1908), pp. 108-158 ("Elisha Bartlett: A Rhode Island Philosopher"). Also see S. O. Sapin, "Elisha Bartlett, American Clinician," N. Y. State J. of Med. 49 (1949):935-938, and E. Bartlett, An Address Delivered at the Anniversary Celebration of the Birth of Spurzheim, and the Organization of the Boston Phrenological Society, January 1, 1838 (Boston, 1838).

[110] Bartlett, Ibid., pp. 1, 7.

With these words of encouragement from such a prominent physician as Elisha Bartlett, the BPS entered its sixth year. It is unfortunate that this year saw the commencement of the decline of the BPS; for, at this juncture American Scientific Phrenologists should have been encouraged by an American tour by George Combe, and the founding of a new phrenological journal which would continue successfully until early in the 20th century.

The BPS and "Scientific Phrenology" in Boston: The Declining Years, 1838 and Beyond

As was the custom in Victorian Boston, and Victorian America in general, public lectures on popular and interesting topics provided one of the main sources of entertainment for great numbers of people. George Combe, who toured this country during the last three years of the decade of the 1830's--the beginning of the Victorian era--, commented on the public's zeal at that time regarding what were called "popular lectures." In his highly detailed account of his American travels he noted

> I find that the same system of desultory lecturing prevails in Boston [in 1838 as that prevailing in England]. Lectures are delivered almost every night in the week in one institution or another, which are attended by audiences numbering from five to fifteen hundred persons of both sexes; but entertainment and excitement, as much as instruction, are the objects of these discourses. In general there is a new subject and a new lecturer every night; and three lectures on one topic are regarded as a very full exposition of it.[111]

There are several aspects of Combe's observations on the interests of Bostonians in 1838 which may be seen as deleterious to the activities and influence of the BPS, and to the continuance of scientific phrenology in general in

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[111] G. Combe, Notes on the United States of North America During a Phrenological Visit in 1838-9-40, 2 Vols. (Philadelphia, 1841), 1:81.

that area. He has indicated that the public demanded not only a variety of lectures on a variety of topics, but, they demanded these frequently and became easily bored if novelty and entertainment was not introduced. The BPS had been conducting public lectures for about five years at this point in time during which period they made every attempt, as far as this writer can gather, to disseminate "factual" and "functional" knowledge to their auditors. Their purpose was not to entertain. Rather, their goals were to advance phrenology "scientifically" by functioning as a society for mutual improvement wherein the membership was made responsible for contributing to the advance of their "discipline" by reporting on their own personal "observations of nature." This required continuous effort since, as the reader will recall, the BPS strove to have its Society meet every two weeks. The lectures delivered for the public at large, while frequent, were more erratic. If the Bostonians of that era sought for novelty, entertainment, and "no more than three lectures on one topic"--even if Combe were slightly exaggerating in regard to the latter--scientific phrenology would not fit the bill on any of those counts. It wasn't new (after five years' exposure to it), it probably wasn't entertaining any longer, and it most certainly went (by this time) beyond the three-lecture per topic minimum. But the BPS persisted, and still did attract fairly good size audiences. Furthermore there were still among the membership, enthusiasts who were keeping the phrenological ball (or bump)

rolling, and kept phrenology before the public eye. Popular "practical phrenology" soon became more "entertaining" than "scientific phrenology" ever was, and reattracted large crowds. That eventuality, however, was not consonant with the interests of the BPS. But an exceptionally hot July in 1838, as the Boston Medical and Surgical Journal noted, would find people "unwilling to be confined to a room with the thermometer at ninety" to hear any phrenology expounded, scientific or otherwise, however "sensibly" delivered or however entertaining.[112] The Autumn of 1838 was a slightly different story. But before continuing this chronology, it appears necessary to digress for a moment to comment on what I believe to be another important part of the history of this period, i.e., the Boston Medical and Surgical Journal's persistent support of what eventually epitomized non-scientific phrenology in all its aspects.

On Wednesday 12 September 1838 the Boston Medical and Surgical Journal announced that it had received a prospectus for a new periodical to be called the American Phrenological Journal and Miscellany.[113] It was this journal, which was to serve as the literary arm of American practical phrenology per se, that brought such prominence to the phrenological dynasty begun by Orson Squire Fowler. The Boston medical journal continued in their expression of interest

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[112] 18 (July, 1838):371.

[113] 19:96.

in this journal and support for scientific phrenology at that writing by noting that

> Such a work is much needed in this country, and deserves the sustaining patronage of the advocates of science.[114]

They took the opportunity to point out that the Annals of the BPS died through a lack of subscribers adding--albeit partly erroneously--that "It was in Boston that the first Phrenological Society was organized in the western hemisphere, which still exists, possessing a cabinet of rare value." Boston's phrenological society was not the first (see Chapter IV). In any case, the editors then commented

> . . . all who are well-wishers to human knowledge . . . should aid and assist in the maintenance of a work that will embrace a vast amount of curious matter, which otherwise cannot be concentrated in a form so convenient or systematic, as by a person diligently occupied in the science [of phrenology]--for a science it is, and phrenology, notwithstanding the buffetings it has received will ultimately command the respect of the highest order of talents in this country . . . [The Journal's] success will give us unfeigned pleasure.[115]

This early expression of support for a journal which was to eventually epitomize all that came to be viewed laughingly in regard to phrenology's history is significant. The Boston medical journal was a prestigious one and tenets which it lent support to would not go unnoticed. Orson Fowler's journal, which Davies characterized as "the bible

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[114] Ibid.

[115] Ibid.

of practical phrenology and hardly the apostle of pure science,"[116] received much support in Boston during its early years. A sampling of the Boston medical journal's running commentary on Fowler's journal's early progress--which they included in their "medical intelligence" section --is not without interest, e.g.,

1. On 3 October 1838 they wrote: Fowler's journal contains "well-written articles . . . [and it] should be sustained by those who take an interest in the progress of phrenology";

2. On 23 January 1839: "we really like the journal exceedingly, and warmly recommend it to the favor of the medical faculty";

3. 20 February 1839: The journal "is really an excellent publication, with which we could not well dispense . . . Mr. O. S. Fowler, a well-known operative phrenologist, [displays] the whole intellectual condition of an individual's head--feelings, propensities, good, bad or indifferent . . . [better than any man living.] Success to the American Phrenological Journal";

4. Commenting on No. 10 of Volume 1, of Fowler's Journal, the Boston medical journal wrote (24 July 1839): This issue "exhibits the same care and good judgement which have characterized the entire series from the beginning. Even the opponents of the science must admire the patient researchers of these philosophers";

5. 25 March 1840: "Mr. Fowler's analysis of the Quakers head [in his journal] is one of those resistless arguments in favor of the truth of the science, which would convert a pretty stubborn oppositionist," and,

6. 16 February 1842: This "well-conducted Journal . . . Since it is the only journal devoted to phrenological science in the United States, . . . should certainly be well sustained . . .

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[116] Davies, p. 44.

> [Mr. O. S. Fowler] is ernest, yet always clear, modest and consistent--and impresses his readers with a conviction of the importance of studying for themselves the great truths brought to light by this system of mental philosophy."[117]

I have digressed a bit at this point regarding the Boston Medical and Surgical Journal's support of the American Phrenological Journal and Miscellany, and Orson Fowler, since I believe it to be a correct reflection of the scientific Zeitgeist in Boston in regard to phrenology in the late 1830's and early 1840's. That is, it reflects the way phrenology was viewed by a great number of intelligent men. While phrenology was still being attacked by opponents, and although the activities of the BPS were winding down, there were still many individuals who saw phrenology as not only being scientific but actually viewed it as an established science. The Boston medical journal certainly did. This may have contributed to the slow decline in interest, however, which began about this time (cf. Combe's comments below). For those who believed that phrenology was established, might have found it superfluous to continue to question and seek proofs for the suppositions that, e.g., the brain was the organ of the mind, that there were a multiplicity of mental faculties, and that the external configuration of the head --its size and shape--was a fair indicator of mental capacity. They may have viewed questioning the truthfulness of phrenology as being almost as absurd as questioning the fact that unsupported objects placed in space within attractive

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[117] Boston Med. Surg. J. 19:161; 19:403; 20:34; 20:386; 22:114, and 26:34 respectively.

distance to the earth fall to the ground. Since it was "established," those whose "scientific" interests were only avocational, may have decided to leave phrenology's practical applications to those so inclined. The Boston medical journal's support of Fowler's enterprise may have been a reflection of the scientific community's more sober attempt to get even more data on the subject even though they too (i.e., the editors) suggested by their statements that they believed phrenology established. Capen's reasons for the decline of the BPS were that phrenology "ceased to be a novelty," and, like all "new subjects or discoveries, after a certain time [they] cease[ed] to command special attention. If established," he continued, the "controversy ends."[118] It is my contention that in 1838 the controversy was ending as far as the BPS and scientific phrenology in Boston was concerned for the simple reason that the "science" was being viewed as "established," i.e., "proven" to be based on "fact." With no controversy, there is little excitement and little need for zealous rallying to the cause. But the BPS did not cease to exist in 1838. Their meetings became increasingly less frequent at this time and ended for all practical purposes according to Capen in 1842; as late as 1849, however, some meetings occasionally occurred. But the most momentous event in the Fall of 1838, to return to our chronology, was the visit by George Combe to the United

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[118] Capen, Reminiscences, p. 124.

States. We must back up to that point again in order to proceed forward.

George Combe, the head of phrenology since the death of Spurzheim, sailed from England 8 September 1838 and arrived in New York on the 25th of the same month. He was met by his American friend, the Counsellor of the BPS, Nahum Capen.[119] Combe remained in New York for but three days; and, after arranging to deliver lectures there in November, he left for Albany to visit a brother, William, a brewer. On 29 September 1838 Amos Dean, author of Lectures on Phrenology (Boston, 1835), and a Professor at the Medical College of Albany, wrote to Capen (who may have been back in Boston at this time). In that letter he stated succinctly the hope of the leaders of phrenology in this country:

> We must certainly continue to advance the interests of the science, and as a necessary result of that, those of humanity, as much as possible in this country, through . . . [Combe's] instrumentality. He has a large capital to begin with, and to operate upon, in this country; larger, I think than that of any other literary man. He has it in his power to advance the great cause of true knowledge here beyond anybody else that I am acquainted with, and I am very desirous he should do it.120

On 7 October 1838 Combe was in Boston preparing for his lectures which were to begin three days later. The Boston lectures--sixteen in number--proved to be reasonably successful and no doubt pleased the BPS Executive Board which was

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[119]C. Gibbon, The Life of George Combe, 2 Vols. (London, 1878), 2:29.

[120]Dean to Capen, 29 September 1838, Capen Papers, n. 10.

involved in their planning. Combe wrote his brother on 14 October that he had over two hundred auditors at the opening of his course, but that he was disturbed by the fact that the proper Bostonians in his audience were not in the habit of "applauding lecturers or public speakers."[121] (One wonders what they did do?) The Boston Medical and Surgical Journal took notice of Combe's presence in Boston, and the editors indicated that they had attended the lectures confessing that they were "not only very much gratified, but profitably instructed."[122] Furthermore, it was added that

> Physicians will reap as much benefit from these lectures, if not more, than any other class of hearers, because . . . [Combe] clears up points that have always been obscure in diseases of the brain. On insanity, particularly, the facts advanced in proof of the positions laid down, are too important to be disregarded by those who profess to relieve the worst of maladies to which humanity is predisposed. Without going into details, it is sufficient to say, unhesitatingly, that the study of legal medicine and mental philosophy, without a knowledge of the principles of phrenology, illustrated by one as thoroughly conversant with both, as Mr. Combe, cannot be studied to advantage, or understood in all their length, breadth and bearings.123

The Boston medical journal continued beyond this entry to express the highest regard for Combe, his science, and his

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[121] C. Gibbon, 2:31

[122] 19 (October, 1838):177-178, 193.

[123] e.g., Ibid., p. 194.

erudition. They published notices of his lectures elsewhere in the country and kept their readers posted on their fellow-countrymen's reaction to the new "prophet."[124] Furthermore, throughout the remainder of 1838 and 1839 the Boston medical journal continued its coverage of phrenological activities in general. Fowler's journal was doing reasonably well now and, as was mentioned, was warmly received by the literary arm of Boston medicine. The activities of the PBS were directed in the Fall of 1838, however, mainly to Combe, their guest. But the Fifth Anniversary of their society was a private affair again, for no formally published address ensued from the 31 December 1838 proceedings. Phrenology continued its decline as far as the BPS was concerned during 1839, although a comparatively large number of articles on various aspects of phrenology appeared in the Boston Medical and Surgical Journal that year. Perhaps believing that Combe needed more time to get Boston excited about phrenology again, i.e., Boston needed more of Combe, the Executive Board of the BPS scheduled him to give the anniversary address for 1839. As it turned out this would be the last published address, and therefore, was the last public celebration of that organization.[125] Furthermore, we discover from Combe's address that something much worse

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[124]Ibid., p. 32, and Gibbon, 2:29.

[125]According to Capen, the addresses for the public celebrations only were published by the BPS, Reminiscences, p. 122.

happened to the BPS this fateful year--its active existence had ceased!

Writing in January of 1839 a correspondent informed the readers of Fowler's journal that

> Although less has been said of late, in Boston, with reference to the [Boston Phrenological] society or phrenology in general, than at first, yet the number of intelligent thorough-going phrenologists have been constantly increasing. I am personally acquainted with medical gentlemen, of high standing in their profession, [he continued,] who, although they are not at present personally connected with the [Boston Phrenological] society, are still pursuing their phrenological investigations with zeal and success. A gentleman upon whose judgement I have the best reason for relying, recently remarked to me that full one-half of the medical profession of Boston, whether we regard number or talent, are decidedly favourable to phrenology, and some of the first of the profession are its open and firmest advocates.126

If there were a grain of truth in this correspondent's remarks, it might be that in 1839--as was suggested even earlier --, "gentlemen of high standing in their professions" found the necessity of a formal society devoted to phrenology superfluous. They found it superfluous for reasons already mentioned--phrenology was now "established"--or, they found it prudent to become closet phrenologists due to the fact that half of their fellow professionals were not convinced of phrenology's truthfulness. Some too may have exhibited what we today would retrospectively call foresight--i.e., they may have seen phrenology for what it eventually became,

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[126]See n. 23.

viz., a pseudo-science in the least favorable meaning of that word. But what ever the reasons for the decline, Combe has informed us that the BPS ceased to exist in 1839. This is not to say that Capen's 1842 date is incorrect--although it is partially so--for what appears to have happened is that the BPS did continue beyond 1839 and beyond 1842 not in the manner of its former glory, but in the form of a select group of believers who continued to meet--however covertly to further the science they had come to love. In Combe's address of 31 December 1839, perhaps at the request of the Executive Board of the BPS, he addressed himself to the problem of the society's demise and suggested a program for renewed activity for the membership and a reavowal of their beliefs.

December 31, 1839 was a typically cold New England day. In Combe's notes on his American tour he indicated that the thermometer was at zero. But it was Spurzheim's birthday and was therefore solemn in the eyes of those who had known him. The BPS engaged the Melodeon Theater for that New Year's Eve and Rev. John Pierpont opened the proceedings with a prayer. Various "Airs" were performed on the organ, and these were followed by Combe's address and benediction. The attendance "exceeded 600 persons" we are told,

> . . . and would have been larger, but for the circumstance, that at the same time Governor Everett delivered the introductory address to the Lowell lectures in the Odeon,

and had an audience of at least 1500.[127]

Although the public were invited to attend, Combe addressed the assemblage as if all were phrenologists. "We have met together this evening," he began

> on the anniversary of the birthday of Dr. Spurzheim, to celebrate the institution of the Phrenological Society of Boston, and the Council of the Society has done me the honor to request me to address you on the occasion. It affords me much gratification to comply with their desire. In addressing an American audience, the speaker enjoys the inestimable advantage of breathing the air of Liberty; and only in such an atmosphere can Phrenology flourish.128

Combe followed these opening remarks with an account of the unsympathetic reception of Gall's theories in Austria and France earlier in the century adding that in America, with her tolerance of novelty and her history of liberty, Phrenology should flourish. "On this occasion," he continued

> I regard myself as a Phrenologist (whose opinions are founded on nearly twenty-five years of observation and reflection, in various regions of the globe,) addressing a Society of Phrenologists whose convictions of the great truths of the science are as firmly rooted as my own. [But, Combe added,] It is seven years since this Society was instituted . . . for the cultivation and diffusion of a knowledge of Phrenology; but after some vigorous exertions, displaying zeal and talent in its members, its active existence has ceased. In its splendid but brief career, it does not stand forth a

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[127] Combe, Notes, 2:220.

[128] G. Combe, An Address Delivered at the Anniversary Celebration of the Birth of Spurzheim, and the Organization of the Boston Phrenological Society, December 31, 1839 (Boston, 1840), p. 3.

> monument of that youthful passion for novelty, and that lack of perseverence, amidst obstacles and difficulties, which is said to characterize the people of this young and ardent nation; but it has yielded to the operation of causes which have equally, and in the same manner, paralyzed several of the Phrenological Societies of Europe. It may be interesting to trace the nature of these adverse influences, whose effects we deplore.129

What caused organizations such as the BPS to cease to exist? In the main, Combe contended, it was due to their having "prescribed to themselves objects of too limited a nature." By this he meant in particular, prescribing to themselves the main function of verifying the observations of Gall and Spurzheim and others in regard to the organs of the mind and their functions. It was this goal, the reader will recall, which was the raison d'etre above all others of the BPS to begin with. Combe, while not suggesting that a knowledge of the functioning of the faculties was unnecessary (far from it, he believed it is "the first step . . . second step, and . . . third step in the formation of a true phrenologist"), did contend that "this department [of phrenological science] is comparatively narrow."[130] Combe's analysis of the problem continued and in his discussion of the issues involved, i.e., the problems of phrenological societies in general, he describes what this writer believes to have been the specific problem experienced by many members of the BPS.

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[129] Ibid., p. 5.

[130] Ibid., pp. 5-6.

After a few years study, he noted

> . . . an individual of ordinary powers of observation may attain to a full knowledge of organology, and a thorough conviction of its truth; and if he stop there, he will resemble a geometrician, who, after having mastered all the demonstrations of Euclid, shrinks from applying them. He would find the constant repetition of them uninteresting, because they had become familiar, and led to no practical results. The same rule holds good in Phrenology. To sustain our interest, we must proceed to apply our principles; and here our difficulties commence. The most timid mind may employ itself, in the secret recesses of its own study, in observing casts, or in manipulating living heads, and suffer no inconvenience, except perhaps a passing smile of derision from some good-natured friend, who esteems his own ignorance more excellent than our knowledge. But when the Phrenologist advances openly to the application of the principles of his science, then the din of conflict arises. He invades other men's prejudices, and sometimes assails what they conceive to be their privileges; for there are persons who claim as a privilege the profits which they may make by public errors. He is then opposed, misrepresented and abused; and as he is conscious that his object is one of beneficience, he is unwilling to accept a reformer's recompense; discontinues his exertions, and the Society becomes dormant. This fate has overtaken several Phrenological Associations in Britain. They have shrunk from the practical application of their principles, and consequently sleep.131

Combe accused the membership of the BPS of having shunned their duty. He accused them of being ill-prepared for, or worse still, disinterested in, the practical application of phrenology's principles. By practical application Combe did not mean the type of application employed by "operative

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131 Ibid., pp. 6-7.

phrenologists" who were "exciting a vulgar curiosity concerning the science: examining heads; predicting character; using it, in short, as a species of palmistry or astrology . . . [for] large sums of money."[132] By practical applications of phrenology Combe meant using it in education, in the treatment of the insane, in criminal legislation, political economy, and moral science--in short, in the reform and improvement of society in general. For any phrenological society to persist, Combe was convinced that they must expand in these avenues. But, although he was critical of the operative manipulators of heads, he still felt that "they did what higher men left undone":

> They not only boldly proclaimed their own conviction of the truth of Phrenology, but they applied it, to the best of their ability. If the educated Phrenologists will do the same, they will be more successful; and they will wipe away this opprobrium from the science, in the only manner in which it can be removed,--by substituting a better practice in its place.133

But Combe was optimistic. Phrenological societies like the BPS could be revived. "The time is not yet, but will probably soon arrive, for resuscitating . . . [phrenological societies] into active existence," he predicted,

> as Societies for physiological, moral, and intellectual reform; and I venture to prophecy, that whenever they shall embody a reasonable number of members pledged to the application

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[132] Ibid., p. 8.

[133] Ibid.

> of the principles of Phrenology in these great aforementioned fields of usefulness, their success will be conspicuous and cheering.134

After outlining in greater detail how the BPS should proceed in making phrenology more practical, and reaffirming his own conviction of phrenology's truthfulness with the remarks

> I speak literally, and in sincerity when I say, that were I at this moment offered the wealth of India, on condition of Phrenology being blotted from my mind for ever, I should scorn the gift; nay, were everything I possessed in the world placed in one hand, and Phrenology in the other, and orders issued for me to choose one, Phrenology, without a moment's hesitation, would be preferred.135

Combe implored the BPS membership to reaffirm their conviction in the science, and to put into effect the resolution of the Boston Medical Association--recorded at a special meeting at the Massachusetts Medical College, 14 November 1832--which was

> Resolved, that we recommend to our fellow citizens the opinions of the deceased [Johann Christoph Spurzheim], on the improvement of our systems of education, and especially what relates to the development of the physical powers and moral dispositions; and, as they can no more expect to hear them from the lips of our lamented friend, that they lose no time in making a practical application of them to the existing state of our institutions, for the culture of the human mind.136

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134 Ibid., p. 7.

135 Ibid., p. 25.

136 Quoted in Ibid., p. 28. The complete list of resolutions is in C. Follen, Funeral Oration . . . at the Burial of Gaspar Spurzheim (Boston, 1832), p. 33 (see Chapter V).

It is unfortunate, but Combe's remarks were to fall on disinterested ears. The Boston Phrenological Society was to cease existence in the manner of its former glory. Those who did remain involved and still considered themselves members of the old guard BPS, became more like what Andrew Leighton of Liverpool sardonically referred to as "phrenologists of the studio," or "theoretical phrenologists," i.e.,

> Men of liberal education, following the professions of medicine, law, or divinity, . . . [studying] the subject [of phrenology] in their leisure hours . . . 137

In July 1840, the Boston Medical and Surgical Journal noted that

> Since Mr. Combe took his departure . . . very little is said on this heretofore engrossing topic. Still, a few individuals are devotedly pursuing investigations, and accumulating important facts illustrative of the leading principles of the science, which will be regarded, at some future period, with interest by philosophers.138

At that same period of time the learned Benjamin Silliman wrote "It appears to me that phrenology involves no absurdity, nor antecedent improbability," yet, it "is still marching

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[137] A. Leighton, "Phrenology in the United States," Phrenological J. and Mag. of Moral Sci. 14 (1843):128 (formerly the Phrenological J. and Misc.). See also same article in Amer. Phrenological J. & Misc. 5 (1843):349-362.

[138] 22:353.

in an enemy's country."[139]

In 1840 Samuel Gridley Howe was still serving in the capacity of President of the BPS. In December of that year the Boston Medical and Surgical Journal announced that the BPS had been named in the will of Dr. Roberton, "a distinguished Scotch physician, an old resident of Paris, . . . classmate of Sir Charles Bell," and one time President of the "Anthropological Society" of Paris (?) "founded by Spurzheim." A copy of the will had been forwarded to Dr. Howe by George Combe.[140] In his will Roberton left to the BPS his entire collection of busts and other objects relating to Phrenological investigation, the sum of 1,000 Francs to defray the expense of transfer, and his own skull to be placed beside that of his friend Spurzheim. After other bequests, the surplus of his property was given to the Edinburgh phrenological society, who were named Roberton's "universal legatee in absolute property."[141] When Roberton's skull arrived in Boston after his death in 1841, however,

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[139]B. Silliman, "Thoughts on the Reasonableness of Phrenology, and its Claim to the Attention of Scientific Men," reproduced from the Amer. J. Sci. Arts, Vol. 29 in the Phrenological J. and Mag. of Moral Sci. 14 (Edinburgh, 1841):202 & 217, and in the Amer. Phrenological J. & Misc. 3 (1841): 130-141.

[140]Capen, Reminiscences, p. 47. A copy of the Will is in the Samuel Gridley Howe Papers, Houghton Library, Harvard University, Boston, n. 88.

[141]Ibid., and announcement in the Boston Med. Surg. J. 23 (1840):342.

the editor of the Boston Medical and Surgical Journal--Dr. J. V. C. Smith--visited the new museum rooms of the BPS in Washington Street and noted only that Roberton's skull "is more striking in consequence of having two prodigious rows of teeth, than for any notable protuberance on the cerebral region." This same J. V. C. Smith included an article on "Statistics of Phrenology" in the "American Medical Almanac for 1841," for which effort he was congratulated by Fowler's Journal.[142]

Over the next few years, the progress of phrenology in America is best recorded in Fowler's journal. The BPS was becoming increasingly obscure but the Boston Medical and Surgical Journal persisted in its coverage of the "science's" development. In September of 1841 they took chagrined notice of none other than a female operative phrenologist who had settled in Boston. In the 1 September 1841 "Medical Intelligence" section of the journal is the following notice:

> Female practising Phrenologist.--A Miss L. M. Barnes advertises, in a Boston paper, that she has taken rooms at the Eastern Stage house. Price of a phrenological examination, fifty cents. This is quite sickening. The science itself is not only disgraced by being made the instrument of a petty income to an ignorant, presuming, flippant-tongued female, but she thus brings contempt upon the sex, of whom better things are expected.143

In 1842, a seven part article, translated from the French

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[142] Capen, Reminiscences, p. 48; Amer. Phrenological J. and Misc. 3 (1841):185, and Boston Med. Surg. J. 25 (1841):227.

[143] 25:69.

of Mr. Jules Lafarque by Dr. John F. May of Washington appeared in the Boston medical journal entitled "An Appreciation of the Phrenological Doctrine, or of the Location of the Intellectual and Moral Faculties, by Means of Comparative Anatomy."[144] Furthermore, it was during this year that this journal could again reaffirm as they had all along that "the science [of phrenology] is firmly established."[145] I will not burden the reader further with details concerning the support phrenology received from the medical community in Boston via their journal. A more detailed account of this would be an interesting project in itself. It might involve, for example, tracing the journal's attitude toward phrenology beyond this era and determining as far as would be possible whom on the journal's staff so stalwartly gave phrenology this support. Typically, news, notes, and, as in this case, "Medical Intelligence," is an editorial task. That is, an editor need not support the tenets of signed articles occurring in his work even though he allows them page-space. But the inclusion of intelligence required more gleaning and I believe we can safely conclude that the fact that so much space was devoted to phrenology, and that it was almost always positive, indicates by implication, I believe, a rather explicit acceptance of its import. Of the journal's

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[144]The first of the series began 14 December 1842 (27:309); the last of the series appeared on 1 February 1843 (27:423).

[145]27:323.

prestige, there is no question. It was, moreover, as Truax has put it, "the acknowledged mouthpiece" of the Massachusetts Medical College (Harvard Medical School) and the Massachusetts General Hospital.[146] But of the BPS at this time, nothing is known. Combe and President Howe communicated regularly during these early years of the 1840's and among their mutual interests was Laura Bridgman whom Howe was then educating. Combe was traveling extensively in Europe, and in the Winter of 1843-44 he and Howe met in Rome. There they would visit the various galleries "in company, viewing the works therein contained in the light of their favorite theory," phrenology.[147] The year 1842, the reader will recall is the year Capen assigned as the year the BPS ceased to exist. In addition to the reasons for its demise which I quoted from Capen earlier, he added these:

> New topics . . . [arose at this time] and these absorb[ed] the public mind. The great master of the science [Spurzheim] had been removed by death, and slowly by death his enthusiastic followers were removed, or scattered by the calls of a business nature. Some may have had a disposition to be active, but were without health or means. Besides, in a society of nearly one hundred and fifty members, there will always be some who injure the cause of scientific investigation by their weakness, their want of sense, and by their tedious dissertations upon subjects they do not understand. This is the common fate of associations made up of members of unequal capacity, and where

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[146] R. Truax, The Doctors Warren of Boston: First Family in Surgery (Boston, 1968), p. 150.

[147] J. W. Howe, Reminiscences: 1819-1899 (Boston, 1899), p. 132.

> pride and vanity often claim a distinction above merit and an influence above that of knowledge.148

The Boston Phrenological Society, founded in earnest but ten years earlier, faded--however slowly--into memory. As the reader will discover below, however, occasional meetings were held by the old Executive Board after this date. But, during the last part of the 1840's, these meetings were for the sad task of discharging the society's financial obligations through the sale of the rare collection of phrenological specimens they had so diligently collected and had valued so highly.

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148 Capen, Reminiscences, p. 124.

The Phrenological Collection

Throughout this chapter I have alluded to the interest which the BPS had in amassing a suitable collection of plaster busts, casts, and likenesses of famous and infamous personages for their use. This interest, the reader no doubt realizes, was not a peculiar one to this group. Gall had amassed a large collection of such items and Spurzheim, the Scotch phrenologists, the Philadelphia group in the 1820's, and others did the same. The purpose of those collections was to provide a permanent visual record of the cerebral developments or cranial configurations of special subjects. While numerical craniometrical data would also be recorded, the casts, busts and skulls provided a more tangible means of observing and determining, e.g., a) the relative size of parts of the head, b) the size of one head when compared to others, c) changes in development of a single subject over time, d) the prominent development of special cerebral organs, and so on. The amassing of such collections furthermore was probably reinforcing to the collectors themselves insofar as the activity itself was perceived as being scientific--i.e., if one collected busts, casts, masks, and skulls illustrative of the principles of phrenology, one was behaving as a scientific phrenologist, ergo, one was a scientist. To the amateur who became involved in the movement, this would have been very important. In addition to these

reasons, the collections provided a very convenient medium for instructing the uninitiated in phrenological theory. But, an additional comment should be made at this juncture regarding this type of collecting, and that is that, in anatomical science of the early 1800's it was in the spirit of the age to collect for didactic purposes any and all specimens of healthy and pathological anatomy and preserve them for instructional use. At the time Gall began his collecting, for example, the famous British physician John Hunter (1728-1793) was preserving anatomical preparations for instruction. This collection eventually numbered 13,000 specimens. In one interesting case, the case of the Irish giant O'Brien, Hunter pursued his potential specimen unabatedly even while the subject was living, providing the giant with much distress. Determined to have the giant's skeleton in his museum, he "overbribed" a fisherman to get the giant's corpse--a fisherman whom the giant had bribed to sink his body at his death in the Irish channel with lead weights--, and the skeleton of this anomaly (92 3/4 inches in height) is in the Hunterian Museum today.[149] In the same spirit--no pun intended--John Collins Warren began a similar collection in this country in the early 1800's and this too eventuated in the establishment of an anatomical

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[149]G. M. Gould and W. L. Pyle, Anomalies and Curiosities of Medicine (Philadelphia, 1897), p. 330.

museum at Harvard (which also exists to this day).[150] The phrenological collection of the BPS eventually became a part of Warren's museum through Warren's efforts (see below), and, as the reader will recall, Warren used some of those phrenological specimens from time to time in his lectures. The point is that the collecting and preserving of any anatomical specimens--be they heads of criminals cast in plaster, or the casting of a foot of an acromegalic man--was a legitimate and therefore not atypical activity for scientists with interests in healthy and pathological anatomy. Since an understanding of phrenology depended on an understanding of anatomy, collections like those of the BPS were indispensable.

Phrenologists since the time of Gall (see Chapter II) were critical of the "experiments" of the physiologists who sought to determine the functions of the brain through extirpation methods. They were particularly critical of the work of Flourens as described in the latter's Recherches expérimentales sur les propriétés et les functions du système nerveux dans les animaux vertébrés (Paris, 1824), Thus, they formulated a different method of attack to prove their science. For, Flourens' type of ablation experiments were analagous, according to Combe, to presenting an instrument capable of making an unknown number of sounds, by an

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[150] J. B. S. Jackson, A Descriptive Catalogue of the Warren Anatomical Museum (Boston, 1870) (especially the "Introduction").

unknown mechanism to an experimenter and asking him to discover "by experiments, what sounds it was capable of producing, and by what precise pieces of machinery each sound was emitted."[151] "Imagine that he [the experimenter] opened its covering," Combe continued

> and seeing a number of wheels and springs, he, at random, broke two or three of them, and that he then set the machine agoing. If it refused to emit any sounds, he would discover that he had destroyed it all. But if it still emitted twenty or thirty sounds how could he tell what sounds were wanting, when he did not know the original number? And how could he discover, by this silence, the particular sounds which the broken wheels and strings were calculated to emit when entire? . . . This is the precise condition in which the experimental physiologists stand in regard to the faculties of the mind. They do not know what propensities, sentiments, and intellectual powers, the mind is capable of manifesting in its entire compass, and they do not know what particular powers are manifested by each particular part of the brain. They therefore proceed to discover unknown faculties, by destroying at random convolutions whose functions are unknown. This is precisely like breaking the strings of an unknown instrument to discover the notes attached to these strings. The philosophical maxim, ex nihilo nihil fit [nothing is created from nothing] is set at defiance; for they destroy the organ, and expect that, after it is destroyed, it will reveal to them its functions.152

Combe outlined four conditions which would need to be met for experiments of this nature to be conclusive. They

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[151] G. Combe, "On the Nature of the Evidence by Which the Functions of Different Parts of the Brain May be Established," Amer. Phrenological J. and Misc. 1 (Philadelphia, 1839):352-361.

[152] Ibid.

were 1) "the part destroyed must be a distinct organ with a specific function"; 2) "the part injured must be such that it may be cut without necessarily involving the disorder of the functions of a variety of other parts"; 3) "the function of the organ to which the cut nerves are distributed must be known" and, 4) "after the operation, these functions should be completely within reach of observation."[153] Combe contended that Sir Charles Bell's investigations of the sensory and motor nerves met all those conditions. Those of Flourens, on the other hand, did not. Some of the conditions, which Combe specified as having been lacking in Flourens' research have been nearly met in physiological research today, e.g., we now have instrumentation capable of destorying the activity of single (or at least small clusters of) nerve cells. However, in some of these investigations today, e.g., in the determination of the function of portions of the hypothalamus, where destruction of particular isolated nuclei was the goal, the interpretation of results has been clouded due to the fact that some investigators cannot agree and state conclusively that the resultant behavioral changes are due to the destroyed nuclei or are due to the irritation of adjacent nuclei from post-operative scar tissue. Reynolds supports the latter interpretation in this controversy in regard to feeding behavior

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[153]Ibid., p. 353.

and the ventromedial hypothalamic nuclei.[154] But, I digress. Phrenologists did not believe that ablation studies would ever lead to a satisfactory physiology of the brain, they felt, rather, that their own methods were preferable. For phrenologists, the basic procedure to follow to understand the functioning of the brain was an estimative exercise of observation and reflection. It was necessary, they contended, to observe the size of the particular parts of the brain--as indicated by the skull during life, and by casts thereafter--and to the comparing of that size with the power of manifesting particular mental faculties. They admitted that their methods lacked that precision which the physiologists demanded--"we [the phrenologists] cannot measure the force of each manifestation of the faculties by ounces and inches." By proper training however, and by an exercise of the understanding, they contended, they could estimate it. "Phrenology, in its evidence, [they believed, furthermore,] rests on the same foundation as the practice of medicine."[155] That is, the phrenologists contended that phrenological analysis was based on the same interpretation of external signs as indicative of internal processes--physiognomy--as the medical practice of diagnosis of disease was. Furthermore,

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[154]R. W. Reynolds, "Hypothalamic Lesions and Disinhibition of Feeding," Science 150 (1965):1322.

[155]Combe, "On the Nature of the Evidence," p. 359.

> . . . the differences between the forms of the particular [phrenological] organs, and between their sizes when large and small, are so palpable [, Combe wrote,] that it is absurd to deny the possibility of distinguishing them in favorable cases; and, in proving a science, we are not only entitled, but are bound by the dictates of common sense [, he continued,] to select the simplest and the most striking cases, instantia ostentiva of Bacon, as best calculated to bring the truth to light.[156]

Thus, with observation being the key to an understanding of mental functioning, it was incumbent on all devoted phrenological enthusiasts to assist in the collection of data. The data, which phrenologists took to mean the facts, information, statistics and the like attained through direct observation, was the concommitance of specific cranial configurations and behavioral patterns as was recorded by observers and illustrated by models in their phrenological collections. Thus, it was in the evidence that these collections provided that phrenological scientists could find reassurance that their doctrines were correct. While they continued to studynature on their own, they had in their phrenological cabinets a wealth of resources to verify and check their own discoveries.

The legacy which Spurzheim left the BPS and which served as the beginning of their phrenological collection consisted of twenty-three whole human skulls, seventeen parts of human skulls, thirty-nine skulls of animals, forty-two large drawings of heads, twenty-nine small drawings of

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[156]Ibid.

heads, sixty-three plaster moulds, and twenty-nine masks. These items comprised Boxes Nos. 1 - 3 of his estate and were the ones later used by Jonathan Barber, John Collins Warren, and others. In addition, as the reader will recall, Spurzheim's own skull became the prize possession of the BPS along with his brain and heart. The disposition of the other memorabilia from his estate is unknown.[157] If we delete from the above listing the thirty-nine skulls of animals and the seventy-one drawings which were not listed in the Catalogue of the BPS collection published in 1835,[158] we discover that J. D. Holm left the Society 154 items; for, 286 items are recorded as being from the combined collection of Spurzheim and Holm. The remaining 250 to 300 items listed there were obtained through the initiative of the society itself--this latter group includes items simply indicated in the Catalogue as having come from "various sources."[159] Copies of this catalogue are extremely rare. The copy which this writer has had access to is one currently owned by the Warren Museum at Harvard. That copy contains not only the supplement to the catalogue which is a hand-written document, but also contains what appear to be

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[157] See Walsh, "The American Tour," pp. 202-203 for a complete listing of the material goods of Spurzheim's American estate.

[158] A Catalogue of Phrenological Specimens Belonging to the Boston Phrenological Society (Boston, 1835).

[159] Ibid., p. 23.

Dr. J. B. S. Jackson's numbering notations for his A Descriptive Catalogue of the Warren Anatomical Museum published in 1870 (Boston) which contained a section on phrenology.[160] Many of the original collection of c. 500 items were lost, broken, or stolen even before 1870. Today, the number of items missing is in the neighborhood of two hundred. Furthermore, when Jackson prepared his catalogue, many items which originally belonged to the BPS were removed from the BPS collection, and were added to other exhibits in the Museum making their location now even more difficult. A corrected catalogue of the remaining items all of which have been photographed by this writer, is a project he eagerly anticipates completing in the near future.

Pursuant to the more general interest of verifying their science as briefly described above (and throughout earlier sections of this work), the phrenologists of the Boston Phrenological Society arranged their collection according to the following general principles of arrangement:

1. To prove that the brain was the organ of the mind, and to illustrate in a general way the influence of form and size a series of casts and skulls, was arrayed, commencing with those of idiots, progressing through intermediate grades, and terminating with those of the giant minds of the world;

2. To show the influence of the direction in which the brain lies, a series of contrasted specimens of known characters was arranged in groups, each specimen to resemble others, of the same group,

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[160]See n. 150, p. 710.

in general size, but to differ in the relative size of the three main regions of the brain;

3. To show the difference in organization on which the difference between the mental characteristics of the sexes depends, male and female skull's were arranged in contrasting pairs;

4. National skulls were arranged to furnish specimens of crania of the various races, nations, and tribes of men; and, to furnish skulls belonging to nations widely differing in character in order that the correspondence of character and development might be illustrated;

5. Skulls of individuals differing in age, from infancy to senility; specimens of healthy skulls, and such as have suffered alteration from disease including the insane; those that are of average and such as are of abnormal thickness; and specimens of frontal sinuses of average and of abnormal size were included;

6. A series was also arranged which illustrated the different faculties, in groups, showing the different stage of development, from the highest predominance to the most striking deficiency;

7. Succeeding the former were groups indicating the combination of faculties which give a tendency, fondness, and capacity for particular pursuits, e.g., the heads of poets, painters, musicians, mathematicians, warriors, and so on; and,

8. Those heads were exhibited which best illustrate the over-activity of the cerebral organs individually or in concert--for whatever cause (heredity, disease, injury, etc.)--as in the case, e.g., with criminals, murderers, felons, idiot savants, monomoniacs, and the like.161

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161 Created from an examination of the "Report of a Committee Appointed by the Phrenological Society of New York to Draw up a Plan for a Phrenological Cabinet" Amer. Phrenological J. & Misc. 2 (1840):215 and the 1835 BPS Catalogue, n. 158.

Thus it was that the gallery of rogues and geniuses, philanthropists, musicians, philosophers, and thieves, Asians, and Indians, idiots, and tatooed natives of the South Sea Islands found their way to Boston in the macabre plaster collection of the phrenological society there. One could view in an afternoon the heads of Gall, Spurzheim, Napoleon, Jeremy Bentham, Samuel Taylor Coleridge and Jesus Christ; examine the heads of idiots, malformed foetuses, hydrocephalic children and the heads of murderers; ponder the head of Hagmane who, with amativeness overly developed, seduced his own daughter when she was but twenty-eight years of age; and stand in awe at the head of Lord Bacon whose head displayed "the largest endowment of the organs which constitute the highest intelligence"--prompting one, no doubt, to wonder how much one resembled the good philosopher. If these were not enough, one could contemplate the head of Major Mitchell, "the Durham boy" with destructiveness overly developed and wonder what went through the mind of the murderer Caesar Reynolds, whose plaster likeness retains for posterity the very eyelashes ripped during casting from his "evil eyes." To make the visit a real treat, the curators of the museum of the BPS might have handed you the real skull of Spurzheim, and, if you were as enawed as this writer was when first handling this relic in 1967, and, if photography were invented, and if you had a photographer handy, you might have your picture taken with it as I did--"Spurzheim and friend, Boston, December, 1967."

Epilogue

That the BPS permanently ceased functioning in the early 1840's has been confirmed by a source other than Capen. Writing to John Collins Warren in September of 1849, Samuel Gridley Howe informed him that the BPS had not met for more than five years.[162] Sometime between 1842-1843, therefore, the active operations of the BPS may be considered to have actually ceased, although as I pointed out earlier, during the last years of its functioning, it was a mere shadow of its former self.

Previously I discussed some of the reasons I considered to have caused the society's demise. These included the development of the conviction that phrenology was established, a disinclination on the part of the BPS membership to become involved in phrenology's practical applications in the best sense of that word as outlined by Combe, and satiation on the part of the general public--whom they were trying to educate--with phrenology as a science per se. But I have also pointed out that phrenology as an art, or phrenology as a form of entertainment in parlor and theatrical characterological demonstrations was on the upsurge at this very moment. Merle Curti has commented on this latter development recently by noting that

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[162] S. G. Howe to J. C. Warren, 17 September 1849, Warren Papers, n. 53.

> The vogue for phrenological 'readings' [during the 1840's and beyond] among the common people can be in part explained by the prevailing social atmosphere. In . . . [this] period when the common man began to feel within him the stir, of power and ambition, [popular] phrenology [, as opposed to scientific phrenology,] had a lot to offer him. It was not merely that he could have, from a wandering 'practicing [i.e., operative] phrenologist' or at the parlors of Fowlers and Wells on Broadway [New York City] a reading which would set him right regarding the kind of mate that he, with his propensities, should choose; nor was it even that he might be told the vocation or business for which he was best adapted. These things, of course, were important. But as some of the critics of phrenology remarked, the common man seeks for something which will solve all his difficulties, something which will reveal nature's secrets and savor of a mystery or miracle. What the more esoteric mental philosophies were supposed to do for the college-bred man, [operative or practical] phrenology claimed to do for any man.[163]

What Curti did not point out in the reamrks above was that during the years 1832-c.1842, phrenology too was mainly an "esoteric philosophy . . . for the college-bred man." It was only toward the end of that era that phrenology in its revised form increasingly became a special subject of interest for the "common man"--men (and women) who were taught the new philosophy by peripatitics of increasing ubiquity, not by scientists, men who came to prefer the novelty of the new interpretation of what phrenology was capable of, i.e., men who were satiated with the old scientific phrenology of the Boston school. But there were other happenings during this period which, in their cumulative

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[163] M. Curti, The Growth of American Thought, 3rd ed. (New York, 1964), p. 333.

effect, served to intrigue the common man more and more and attract him to the new phrenology, while simultaneously disenchanting those who had approached the subject more seriously in years past. One of these events was the "mesmeric epidemic." Another was what came to be known as phreno-magnetism (or phreno-mesmerism)-- a peculiar combination of phrenology and animal magnetism. The third, which grew out of the previous two, was "modern spiritualism" and the advent of somnambulic healers and table-tipping mediums.

Among the earliest to take notice of the influx of mesmerism in America was none other than the Boston Medical and Surgical Journal--the defender of the "old phrenology." "The mesmeric epidemic" of the summer of 1841, as they called it, caused them to take umbrage at the fact that the medical profession of Boston was being "associated as a body" with this malicious Animal Magnetism. On 4 August 1841 they expressed their chagrin at

> . . . the late animal magnetism fever that raged fearfully in Boston towards the last of June [1841, pointing out that] it is abomnible to hold up the whole medical profession of the Metropolis, as fit subjects of ridicule, because a few of the brotherhood may deserve to be laughed at for playing second fiddle to a 'Professor of Mesmerisms' . . . How excessively mortifying all this must be to the respectable members of the Massachusetts Medical Society . . . 164

The mesmeric epidemic that "raged" in Boston during these early years of the 1840's represented the beginning of what

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[164] pp. 428-429.

Ellenberger has referred to as the "third phase" of positive regard for mesmerism.[165] That is, the second resurgence of interest in phenomena ostensibly shown to be a hoax during its grand days in latter part of the 18th century. Although mesmerism was actually introduced into this country much earlier, the early 1840's witnessed the appearance of peripatetic mesmerists simultaneous with the increase of peripatetic operative phrenologists. Furthermore, the magnetizers passed themselves off as the prophets of a new era in medicine, wherein diseases would be cured without drugs, and surgery performed without pain. Much of this originated in England, where John Elliotson was conducting and reporting on his painless surgical operations conducted with his patient in a magnetic sleep; and, at the same time, James Braid--who coined the word "hypnotism"--was doing the same.[166] But Elliotson introduced a unique twist.

Having had an interest in phrenology for years, Elliotson "claimed to have succeeded . . . in stimulating the various brain centers [i.e., the phrenological organ topological areas] in hypnotized subjects, . . . [which gave] rise [, ostensibly] to a manifestation of those dispositions

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[165] H. F. Ellenberger, The Discovery of the Unconscious (New York, 1970), p. 83.

[166] J. Elliotson, Numerous Cases of Surgical Operations Without Pain in the Mesmeric State (Philadelphia, 1843), and J. Braid, Neurhypnology, or the Rationale of Nervous Sleep Considered in Relation to Animal Magnetism (London, 1843).

and capacities located in those regions."[167] The upshot of this was the development of phreno-magnetists, or phreno-mesmerists, who sought to not only entertain on the "popular lecture" circuit, but, sought to "prove" the truthfulness of phrenology by their phreno-mesmeric "experiments." But the history of events related to these happenstances is a complex one. It led, for example, not only to what came to be known as the "mind-cure" and then Christian Science, but to other complex esoteric systems such as Joseph Rodes Buchanan's "neurological anthropology" and "therapeutic sarcognomy"--an odd mixture of phrenology, mesmerism, clairvoyance, and medicine.[168] Furthermore, it was not destined to be shortlived. As late as 1885, for example, one can discover Dr. Warren F. Evans of Boston writing on "phreno-magnetism and its use in medical psychology."[169] But in the 1840's when these events were beginning, they were alarming to many members of the Boston medical profession. The Boston Medical and Surgical Journal in particular expressed its alarm when it pondered the fate of the "old phrenology," which it was still defending, with

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[167] Hollander, 1:361.

[168] R. Buchanan, Outlines of Lectures on the Neurological System of Anthropology, as Discovered, Demonstrated and Taught in 1841 and 1842 (Cincinnati, 1854), and, R. Buchanan, Therapeutic Sarcognomy, . . . and a New System of Therapeutic Practice Without Medicine, by the Vital Nervaura (Boston, 1884).

[169] W. F. Evans, Mental Medicine: A Theoretical and Practical Treatise on Medical Psychology (Boston, 1885).

these words:

> How phrenology is to fare in the present rage for new systems of mental philosophy, cannot be determined [they are referring here to the fact that the new breed of operative phrenologists were developing their own unique systems] . . . Happily for science, there are men capable of appreciating truth, and disengaging it from the mass of falsehood and trickery which is sought to be incorporated with it. Phrenology, after undergoing a variety of degradations by being mixed up and compounded with the rarishow exhibitions of animal magnetism, will by-and-by be resuscitated, and shine with its former splendor; and will one day have a place with the exact sciences, where it legitimately belongs, but from which it has been kept away by the enemies of its discoverers. [Italics mine].[170]

The editors of the Boston medical journal could not have known, however, that things would get worse and not get better. They could not have known that at that point in time, for example, that J. Stanley Grimes--one of the new operative phrenologists, a magnetizer, and innovative systematist--was, that very year, at his lectures in Poughkeepsie, New York giving rise to "modern spiritualism."[171] Clairvoyance, animal magnetism, and the "new phrenology" would come to totally engage the general public, and, in the process, the old guard members of the BPS, who sought to have phrenology take its place among the "exact sciences," slowly came to realize that the science of phrenology they once embraced was no more. Phrenology in its new and more flamboyant

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[170] Wednesday, 27 December 1843, p. 423.

[171] A. A. Walsh, "A Note on the Origin of 'Modern Spiritualism,'" J. Hist. Med. All. Sci. 28 (1973):167-171.

dress would attempt to change the world, and in that attempt it would reap its own destruction. For a more complete account of the events subsequent to this date, the reader is referred to Davies (n. 32), Stern (n. 64), and Hollander (n. 67). The latter work, while decidedly in favor of Gall and phrenology, is, nonetheless, clearly definitive.

With the dissolution of the Boston Phrenological Society, and, with the concommitant absence of funds to support a museum, their rare collection found its way to the Institution for the Blind--then at South Boston--and into the protective custody of the last President of the BPS, Samuel Gridley Howe. There it remained during the middle years of the 1840's. Toward the end of that decade, we discover that John Collins Warren was retaining his interest not only in phrenology, but in Spurzheim and the collection of the BPS. In a letter dated 18 May 1847, for example, Nahum Capen replied to Warren's inquiry of that date and forwarded to him information relating to biographical sources on the life of Spurzheim.[172] But toward the end of 1848, Warren initiated more interesting correspondence with Samuel Gridley Howe for the express purpose of acquiring the collection of casts, busts, and skulls formerly owned by the BPS and which had for so long been in storage and out of public view. Warren's proposal to Howe was to discharge the debt of the society and pay whatever else might be required

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[172]Warren Papers, n. 53.

for the collection's transfer. The collection, Warren felt, would be "useful to the public." On 25 June 1849 Howe wrote to Warren:

"Boston, June 25, '49.

"Dr. J. C. Warren

"Dear Sir:

"You made a proposition last year to take the cabinet at the Boston Phrenological Society. Some difficulties which then existed to the acceptance of your proposition are now removed: I should be pleased to know whether you are now disposed to take the cabinet upon the terms then proposed.

"Very truly yours,

"S. G. HOWE."[173]

On the 26th of the same month Warren replied:

"Brookline June 26 1849

"Dear Sir

"I am very much obliged to you for your note of this morn. and [I] am gratified that you have kept the subject in mind.

"Being unable to recollect the probable value of the collection, I sought for your note on the subject without being able to find it, and have no idea of the sum indicated therein.

"Will you be so kind as to let me see a list of the collection and, if this is not possible, to give me the best idea of it you can; and, also, of the sum for which it could be disposed of . . . I feel a very great inclination to get the collection, if it is attainable. But to be frank, I must say that I have meddled with so many things of the kind, that from this and other concomitant circumstances, I feel, at this time, a hesitation which did not exist formerly.

"With great respect,
"I remain, your friend

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[173]Reproduced in Warren, n. 68, p. 9.

"J. C. Warren"[174]

Perhaps contemplating the possible loss of the sale, Howe responded to Warren the following day:

"Boston, June 27, '49.

"Dear Sir:

> "The debt of the Phrenological Society is only about $125. The cabinet was stowed away in an attic chamber many years ago. It is I presume in a tolerably good state or preservation though I have not examined it. I hardly know how to find a catalogue. According to the best of my recollection there are about 25 skulls (of which Dr. Spurzheim's is one) and between three and four hundred casts.
>
> "The cabinet could be easily sold to some of the soi-disant [i.e., so-called] phrenologists who peddle their wares about the country for more than the sum named above, but the Society is not disposed to sell it. Whoever takes it however will probably hold possession, for the Society has been so long dormant that it is not likely ever to revive.

"Very truly yours,
"S. G. Howe"[175]

On 29 June 1849 Warren answered Howe accepting the conditions Howe outlined.[176] But on 5 July 1849 Howe wrote a curious note to Warren. I have stated earlier that the BPS for all intents and purposes ended around 1842-1843. Howe's note of 5 July, however, indicates that some individuals were still identifying themselves with the BPS. Howe wrote on that occasion:

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[174]Howe Papers, n. 88. Another (copy?) signed by Warren is in the Warren Papers, n. 53.

[175]Ibid.

[176]Ibid.

> "I find that some unexpected . . . [concern?] on the part of some members of the phrenological society make it necessary that I should call a meeting previous to transfering the change of the cabinet.
>
> "As soon as I can arrange it, I will make the transfer with great pleasure.
>
> "Very truly yours,
> "S. G. Howe"177

The final conditions of the sale, reproduced below, reconfirm that there still were former society members interested in the science of phrenology at this late date. The reader will note that the collection was sold with the proviso that BPS members would have access to it and that they could purchase it back if they chose to do so. Thus, it was not an outright sale at that time, viz.,

> Boston, September, 1849.
>
> It is hereby agreed between S. G. Howe and Samuel Downen, Jr., representing the Boston Phrenological Society on the first part, and Dr. J. C. Warren on the second part, that the cabinet and collection of the said Society shall be given into the possession of said J.C. Warren, in trust, for the said Society upon the following terms: viz., said J. C. Warren shall pay one hundred and fifty dollars into the hands of the Treasurer of the Society.
>
> He shall agree to preserve the cabinet and collection and let it be accessible at reasonable times to the members of the Society.
>
> He shall agree to deliver back the cabinet and collection, in good condition, to the Society or its agents if it should be called for at any time within five years from this date: six months' notice being given to him and the sum of one hundred and fifty dollars repaid to him.178

In a later note, which I referred to earlier in this chapter,

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177 Ibid.

178 Warren, n. 68, p. 9.

however, Howe told Warren that the BPS had not met for more than five years. To reassure Warren regarding the reclamation clause, Howe added at that time that he doubted that the BPS would ever meet again.[179] And so it was. As was Warren's intent, the entire collection was donated to Harvard, and there it has remained to this day--never reclaimed by its former owners. Furthermore, we learn from the Warren papers that special conditions were laid down regarding the skull and brain of Spurzheim and that of Roberton. Those relics could be reclaimed by the BPS authorities at any time. Furthermore, they were stored separately for a number of years in Warren's private collection.[180]

Later in the century, after Warren's death (1856), we discover that his son, J. Mason Warren (1811-1867) retained an interest in the collection, and e.g., purchased Alvan Fisher's portrait of Spurzheim lecturing and donated it to Harvard in 1860. In 1867, J. Mason Warren and Nahum Capen were exchanging correspondence regarding the planned deposit of a record of facts concerning Spurzheim at Mount Auburn; and, at the former's death in 1867, the skulls of Spurzheim and Roberton, and Spurzheim's brain, were bequeathed to Harvard.[181] Spurzheim's brain is now lost; but, the skulls of the two friends in science are there to this day.

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[179]Howe to Warren, 17 September 1849, Warren Papers, n. 53.

[180]Warren, n. 68, pp. 9-10.

[181]All in Warren Papers, n. 53.

Although treated respectfully by the current Curator of the Warren Museum, no longer are these relics stored in a fire-proof safe. On a recent visit there, in fact, in July 1973, they were displayed in a well-done phrenology exhibit in the coffee lounge of the Countway Library of Medicine, looking over the shoulders of seemingly disinterested medical students for whom phrenology and the skulls of Spurzheim and Roberton held little or no meaning.

The history of the Spurzheim's collection at Harvard subsequent to J. Mason Warren's interest in it is in that of the Medical school. When BPS counselor Nahum Capen wrote his Reminiscences (n. 2) in 1881 which have been referred to throughout this work, he was able to observe that

> Of the twenty-six members [of the BPS] elected to office during the ten year's existence of the Society, only five . . . [were then] living. Of the whole number of members, during the same period, one hundred and forty-four, only twenty-one . . . [were then] living.[182]

One wonders whether this group ever met as a group after 1850, or whether they ever visited their collection at the Warren Museum to reminisce, or whether a simple polite tip of the hat when passing in the street was all that remained to remind them of the follies of their youth.

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[182] Capen, Reminiscences, p. 121.

CHAPTER VII

OVERVIEW AND CONCLUSIONS

The preceeding narrative has brought us a long way. From physiognomy and the theory of temperament in ancient Greece, through the rise in the development of ideas concerning the functioning of the brain, to Gall and his theory, to his disciple Spurzheim and his views, thrcugh the latter's systematic phrenology and its influence in this country, and on to the establishment and dissolution of the Boston Phrenological Society early in the last century, we find a series of events and ideas which explore an aspect of the history of the behavioral sciences which has not typically been given such in-depth treatment. What has emerged, it is hoped, is a clearer understanding of those aspects of phrenology's history, particularly as it related to Gall, Spurzheim, their systems, and phrenology's introduction to this country. Traditionally, one has heard only of the phrenology of "Gall and Spurzheim" taken collectively and considered as a single inseparable unit. That is, writers on phrenology's history have rarely distinguished between either Gall or Spurzheim and their uniqueness as persons, nor between their two distinctive systems. We discover in the present opus that the two men were unique as were their points of view. Furthermore, it is believed that it was as a result of this uniqueness that

both men, singularly or collectively, have been both criticized and lauded by a variety of writers. Subsequent to Spurzheim's elaboration of Gall's views, Gall's formulations were seen by Spurzheim and his proselytes as having been deficient. Others during the years prior to Spurzheim's death accused him (Spurzheim) of having prematurely systematized the great work of his mentor. Today, Spurzheim has again been criticized for having developed Gall's system beyond, ostensibly, its logical limits; and both men have had their reputation demeaned by inaccurate simplistic accounts of their points of view. But, this latter type of criticism, however, when it has occurred, has been presented by theorists, who typically have not read Spurzheim or Gall, who were not aware of exactly what they proposed, and who have repeated in ignorance the evaluation of phrenology's historical position which was handed to them by tradition. This investigation was not designed to reduce the traditional approbation due to Gall as the originator of phrenology. But, what it has accomplished in part, it is hoped, is a more accurate depiction of the contributions of Spurzheim who, by his systematization of Gall's views and his peripatetic defense of them stimulated a wider audience for his views than Gall had done and thereby eventually induced greater numbers of scientists to band together to test phrenology's claims. Furthermore, it is hoped that this work has succeeded in illustrating that not all phrenologists were fraudulent both in their interests in that doctrine and in

their practical applications thereof. Some of the conclusions which grow out of this investigation follow.

The organological system which Gall developed is one which, while sufficiently unique to give him an important and lasting position in the history of science, is in many of its facets, linked historically to similar problems, queries, and theories on the nature of man which have been explored by writers since ancient times. That is, many of Gall's ideas were anticipated at various points in history prior to him, and by various personages who were both geographically and temporally close or distant. This is not to say that to Gall the merit of having "discovered" organology is not due. It does suggest that some of his ideas were not totally unique to him.

The system of organology which Gall personally developed had limited influence during his lifetime due to the fact that he restricted the presentation of his views to a geographically narrow audience. That is, although phrenology was far-reaching in its influence generally, Gallian organology as it was presented in Gall's own writings was, when compared to Spurzheimian phrenology, less widely understood. For, although Spurzheim ostensibly preached the "physiognomy of Gall and Spurzheim" in his early years after his separation from Gall, he very soon came to stand for a system which, while following the basic assumptions of Gall, was sufficiently unique and systematized to be called his own.

Spurzheim's extension of the views of Gall were logical ones insofar as they were achieved through the same inductive modus operandi which Gall required. Furthermore, the unique system which Spurzheim developed received extended attention and acceptance due to the fact that it sought to depict a view of man which allowed for both hereditary and environmental determinants. That is, Spurzheim sought to individualize the psychology of the period by emphasizing that while people do inherit particular mental--and, therefore, behavioral--predispositions, it was possible to educate and treat the individual in such a way that one could minimize or control his innately strong but perhaps undesirable tendencies, and maximize through tutelage those faculties which were considered weak or dormant but desirable for social intercourse and individual happiness.

The system of phrenology which Spurzheim developed was more attuned to the social problems of his day than was Gall's. Where Gall sought to investigate and explain the functions of the brain and the nature of man, mind and behavior, Spurzheim sought, in addition, to show how this new philosophy of mind could be applied in "practical" ways for the betterment of systems of education, the treatment of the insane, and the improvement of society in general. This use of the term "practical" phrenology must now be distinguished from the type of "practical" phrenology which emerged in this country in the late 1830's. That is, there were two interpretations of what was considered practical. For

Spurzheim, Combe, the BPS, and others devoted to phrenology as a science, practical meant applied for the improvement of mankind and the improvement of his social institutions. "Practical" for the itinerant "operative phrenologists" who arose to prominence in America in the late 1830's meant giving indiscriminate (their activities were considered indiscriminate by the purists) evaluations of character for a fee. The latter were considered by "scientific phrenologists"--phrenologists who sought to prove the truthfulness of phrenology by their "research"--to be bastardizing what they considered to be an established science. Thus, although the writer originally distinguished only between scientific and one type of practical phrenology--using the latter epithet to refer to the bastardized form of phrenology--he eventually realized that a distinction needed to be drawn between two types of practical phrenology as described.

It is difficult to pinpoint the single most outstanding aspects of Spurzheim's personality which contributed to his ability to greatly influence others. There are a number of factors about him and his career, however, which, when viewed in their totality, depict an individual of surprising charm. An overview and commentary on related matters will not be without interest. As the reader will recall, Spurzheim's early education was designed to prepare him for a theological career. No doubt, there were characteristics of that profession which were attractive to him at one time but his eventual decision was to pursue a career

in medicine. His experiences as a tutor in Vienna prior to joining Gall, and his lucky and friendly association with Gall as auditor and demonstrator no doubt suggested to him, however, that the approbation that a teacher-as-authority receives from his students could be quite appealing. As events would have it, he had little time to devote to medical practice per se; for, shortly after joining Gall, the two began their now famous lecture tour of Europe. By that point Spurzheim must have become convinced that Gall's doctrines had far-reaching consequences, for the heated challenges to their views which the two were confronted with from time-to-time must have suggested that some of the older views on the nature of mind were being seriously questioned, and the adherents of those older views were very uneasy. Sometime during this period, Spurzheim probably decided to pursue a career other than that of the general practitioner. He probably saw that there were possibilities for extrapolation from Gall's basic tenets and he must have felt his mission in life was to teach this medico-psychological doctrine to the world and to improve it and expand it for the betterment of his fellowman.

This interpretation of these events suggests an ideal which may or may not actually be consonant with the facts. Some accounts of Spurzheim, for example, have called him an opportunist--suggesting that he simply took Gall's ideas and elaborated them beyond what should have been reasonable. But, critics who have showered such epithets

on him have generally been those who have assigned to Gall alone the merit, using that term loosely, of having originated phrenology and have assigned to his disciple, who extended his views, the dubious position of having beaten a horse that should have been long dead. This type of historical interpretation suggests to this writer that in some quarters of the history of science originators of erroneous ideas alone are tolerated in scientific history and then only when their ideas have contributed in some way to the redirection of science toward what is later retrospectively determined to be more appropriate channels of investigation. To say the least, this is a most unsympathetic and narrow attitude toward one's progenitors in the field of science and suggests what might be termed radical presentism. In regard to Spurzheim, and the many others who behaved as if they were attempting to fit the "data" of their "research" into a phrenological paradigm that was guiding them, I do not believe that we can in good conscience slough them aside as having been simply misguided, or opportunistic. That Spurzheim was in an opportune situation to do what he eventually did do there is no doubt, but to attribute to him insights which were not available to him--viz., that phrenology was basically erroneous--, and therefore to suggest that he took advantage of say, for example, the income potential of the theory, would be stretching the facts. Gall's methods were inductive. So too were Spurzheim's. That Spurzheim was able to extend Gall's views by the

inductive method and add a philosophical system to it is no reason in and of itself to criticize him. Furthermore, that he was the popularizer of Gall's basic theory need not be viewed, as it often is, with disdain. For indeed there are factions existing even in the behavioral sciences today that I could envision being viewed in a similar fashion one hundred years hence. For example, might not the plethora of operant conditioners seem quite foolish in retrospect one hundred years hence if, as Palermo and Mackensie have suggested, the behaviorism paradigm for psychology is in a state of Kuhnian crisis, and is apt to be superseded soon by a new paradigm?[1] If that eventuality were to come about would we be apt to find in the histories of the future reference to Skinner in the role of popularizer and opportunist in an analagous relation to Watson as Spurzheim was to Gall? Would the reinforcement therapists be Howe's "sophomores and blue stockings" running about the countryside applying their techniques for spurious reasons? Perhaps. But I do not wish to carry this analogy too far. For it is only an analogy after all. But, while we may think we are guided today by a paradigm that is truly the quintessence of exactitude, we should, as we would in predicting the New

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[1]See on this point M. R. Keunne, "Experimental Investigation of the Relation of Language to Transposition Behavior in Young Children," J. Exp. Psych. 36 (1946):471-490 as discussed by B. D. Mackensie, "Behaviourism and Positivism," J. Hist. Behav. Sci. 8 (1972):222-231, and D. S. Palermo, "Imagery in Children's Learning," Psychol. Bull. 73 (1970):415-421.

England weather, "wait a minute"--it may change! Furthermore, in the "trial" wherein phrenology has been accused by modern science of having been less than scientific, I believe that our verdict should be a "Scotch decision"--i.e., "not guilty, but don't do it again!" But, I should perhaps digress for a moment to point out that I am arguing here for an historicist position insofar as I believe that historical events (and personages) should be evaluated in the light of the knowledge and skills of the era in which they appear; and, for a behaviorist interpretation of history which I take to mean looking at what people actually did during any given period of history, independent of what our current knowledge says they should have been doing, and independent even of events to which we have retrospectively assigned importance. In the case of Spurzheim, the BPS, and the science of phrenology in general, we discover that despite the fact that, e.g., Flourens' ablation studies in the early 1820's provided what we now consider to have been the most appropriate method of attack to have used to gain an understanding of the functions of the brain, the largest group of cerebral scientists, the phrenologists, were behaving in quite a different way. The presentist attributes to them lack of insight, and considers their efforts to be exercises in futility. The historicist, on the other hand, sees in their activities only an honest attempt to gain an understanding of the brain during an era wherein every effort, however futile, contributed something. Spurzheim and the

many illustrious figures associated with phrenology's history could not possibly all be dupes.

If Spurzheim was not the opportunist that some historians have called him, and, if, as this writer believes, his so-called popularization of Gall's views was approached in good faith and with the best of intentions, we still need to know how it was that he was able to make so many converts wherever he spoke. Based on what I have been able to discover, it appears that Spurzheim was a dynamic lecturer, among other things, and an exceptionally amicable person socially. His life was totally devoted to the phrenological system he expounded, and he was able to convey to his abundant and diverse auditors and friends this conviction in the inherent truthfulness of what he taught. While he seems to have taken many challenges to phrenology personally, he did not present himself on the defensive in as extreme a manner as did, say, Charles Caldwell. Yet he did appear to be somewhat obsessed with the idea that he needed to teach phrenology to the world. He was a handsome man who presented himself well. These traits, when they are considered with the fact that he was viewed by his contemporaries as a "prophet" or "evangelist" and "philanthropist," one can envision his actually "converting" people by his presence. Although many critics could and did attack him and his views at a distance, he seems to have been able to dispose of them rather quickly on a face-to-face basis. His lectures in Boston in 1832 were very well received to

say the least. His ideas were not accepted by all immediately, however, but upon his death, as the reader is aware, his Boston friends were compelled, for what appear to have been legitimate reasons, to organize themselves formally to "test" his views. It appears, furthermore, that Spurzheim's strength of conviction radiated to his Boston auditors who had become enamoured with him as a man. The BPS probably formed, therefore, as a result of a combination of factors including the passion of the moment, a sense of obligation to a fallen friend and hero, and, most importantly, as a result of a scientific spirit of inquiry--instilled in them in part by Spurzheim's sincere plea for them to investigate his science for themselves and determine thereby the truthfulness of his views.

The goals of the BPS when they began were to systematically investigate Spurzheim's claims. Pursuant to fulfilling those resolves the society sought to gather further data to determine the truthfulness of phrenology. Behaving in a way that they believed to be scientific, they methodically studied phrenology, communicated their findings to their fellow members and to the world at large, and made every effort to determine if phrenology had any basis in nature. They were disturbed by the premature "popularization" of their "science" by ill-educated opportunists, and attempted to place restraints on such activities. They were supported in their efforts not only by the medical community, but by a professional audience of much wider scope. Contrary to

what I had envisioned as having caused their ultimate dissolution, it appears that they ceased to exist not because of a conviction that phrenology was basically erroneous, but, rather, because they were convinced that it was an "established" science. With the basic ideas of phrenology having been "tested" and found to be consonant with nature, the need for further investigation was seen by many members of the BPS as no longer necessary. The society slowly dissolved for that reason and for the reason that a good part of the membership were disinclined to become involved in scientific phrenology's more altruistic goals of serving mankind.

As for the nature of the society's research, it appears to have consisted mainly of naturalistic observation, the gathering of examples which would illustrate various points of theory, determining how their theory could be used in special ways to improve social institutions, and educating both their membership and the public. Their collections of skulls and casts came to stand for the basic data on which their theory rested insofar as it was believed that any intelligent man who studied phrenology seriously would see therein all the evidence he would need to be convinced of phrenology's correctness.

The history of phrenology has often been presented as continuous insofar as Gall, Spurzheim and others of equal merit have traditionally been equated, i.e, grouped, with those less honorable manipulators of heads which become

ubiquitous after the late 1830's. I would argue that one must distinguish between two forms of phrenology and two types of phrenologist. There was a form of phrenology which consisted mainly of the facts of observation. The observed fact that, for example, a great many murderers were discovered to have this or that similar cranial configuration, however subtle it was, and however unrelated one might say those observations are, still remains an observed fact. That is, while we can say of the observers of those facts that they were misguided and their assumptions were incorrect, the observed facts remain. There were many facts which scientific phrenologists gathered, and many of those facts have never been evaluated with the statistical tools some have contended would have shown those early observers--had they access to those tools--the errors of their ways. This is not to say that there may be truth in what the scientific phrenologists discovered. It is to say that they believed that they were behaving as scientists should behave, and by so doing they recorded for posterity a variety and multitude of interesting observations about human nature which certainly deserve some exploration. Thus, I would argue that we must recognize those phrenologists who approached their "science" as they believed it should be approached--inductively--, and distinguish them from the real illiterate opportunists who later gave phrenology to the world of the occult. There were two types of phrenology, the "scientific" and the "bastardized applied," and two types of

phrenologist, the scientist and the fraud. While it would be an interesting task to trace scientific phrenology to its ultimate demise, we must recognize that Gall, Spurzheim, and most of the members of the BPS were never engaged in the side-show attempt to simplify the analysis character that the term phrenology has come to imply.

Finis Coronat Opus

Lest we forget that the science of one generation is quite often the pseudoscience of the next, we must give serious thought to the history of phrenology. In that history, we discover, e.g., that phrenology's adherents believed as sincerely in their doctrines as did the adherents of the doctrines which ultimately replaced them, and as do adherents of special interests today. We further discover that phrenology, during its "scientific" stage, came very close to being a "paradigm" in Kuhn's sense of the word. That is, its doctrines were "sufficiently unprecedented to attract an enduring group of adherents away from competing modes of scientific activity," and it was "sufficiently open-ended to leave all sorts of problems . . . to resolve."[2] Dallenbach has cogently noted recently that

> Theories pass from the scientific stage not because they have been disproved but because they have been superseded--pushed off and replaced by others that are new.[3]

That observation applies directly to the history of phrenology. For, phrenology as a theory of psychology was never tested in the strict sense of that word. But during the

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[2]T. S. Kuhn, The Structure of Scientific Revolutions (Chicago, 1969), p. 10.

[3]K. M. Dallenbach, "Phrenology Versus Psychoanalysis," Amer. J. Psychol. 68 (1955):511-525.

19th century, rather, as that century progressed, fewer and fewer scientists could accept what phrenology had taught especially in the face of advancing neurophysiological evidence. Increasingly, the phrenological science of mind came to be associated with figures of dubious scientific skill or insight and thus the scientific community came to feel progressively less compelled to address itself to phrenology's claims. As Boring has pointed out, phrenology was "an instance of a theory which, while essentially wrong, was just enough right to further scientific thought."[4] And this is an essential point. For, need a theory really be anything more? According to Kuhn, science traditionally has not developed in a strictly logical cumulative progression. Rather, it developed by means of sequential spurts which involve (usually) radical shifts in its areas of research emphasis. For Kuhn postulates that "normal science" is guided in its activities by what he terms a "paradigm." This paradigm serves a guidance function for scientists as long as its predictions hold true and no novelty is introduced. However, sometimes anomalies occur which do not support the paradigm, cannot be fitted in its prediction schema, and thus, the credibility of the paradigm is challenged. If those anomalies are of sufficient import, their presence may lead to a

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[4]E. G. Boring, A History of Experimental Psychology, 2nd ed. (New York, 1950), p. 57.

"crisis" for the challenged paradigm and eventuate in the emergence of a new one. Changes to a new paradigm, however, are subtle. Faithful adherents of the older paradigm, Kuhn points out, do not accept change easily. Typically, the youthful scientists who are not so committed to the paradigm being replaced accept the challenge the new paradigm offers and thereby facilitate its emergence. In this manner science is said to progress. The advances in neurophysiology which developed sporadically but methodically during the 19th century might be considered to have been the anomalies which led to the crisis for the phrenological paradigm. For, as research evidence accumulated which failed to support the cerebral organological divisions the phrenologists envisioned, it was not long before a belief in phrenology on the part of a scientist was considered anachronistic. Phrenology was challenged and was defeated. Yet adherents of its doctrines remained to the end.

Phrenology's import for the history of the behavioral sciences is not so much that it directly contributed to the development of theoretical positions which are dominant in psychology today--although its generally postivistic position is still in force--, as much as it is that it provided the impetous for more productive investigations into the brain as the organ of the mind, into studies of the cerebral localization of function, and so on. Furthermore, although it was highly influential as a theory of social, penological, educational, and psychiatric reform, it did not

retain enthusiasts in those areas much beyond the Civil War. Phrenology is in the peculiar position of having been correct enough in principle to have redirected the behavioral sciences into more productive channels of investigation at a period in its history when redirection was direly needed. Yet, phrenology remains, in a presentistic world, an unsung "hero" of our past. It is hoped that the readers of this work will have developed a better appreciation and more sympathetic understanding of Gall, Spurzheim, the BPS, and the many serious researchers who diligently sought to understand human behavior through that "quaint 19th century notion."

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APPENDIX A

WORKS ON, ABOUT, OR RELATED TO FRANZ JOSEPH GALL (1758-1828) AND HIS THEORIES: A SELECTED BIBLIOGRAPHY

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APPENDIX B: PART I

GALL'S TERMS, ORDER OF THE MENTAL FACULTIES, AND SPURZHEIM'S ENGLISH NAMES

Organ Number	French Names	German Names	English Names
1	Instinct de la generation	Zeugunstrieb	Amativeness
2	Amour de la progéniture	Jungenliebe, Kinderliebe	Philoprogenitiveness
3	Attachement, amitié	Anhaenglichkeit	Adhesiveness
4	Instinct de la défense de soi-même et de sa propriete	Muth, Raufsinn	Combativeness
5	Instinct carnassier	Wuergsinn	Destructiveness
6	Ruse, finesse, savoir-faire	List, Schlauheit, Klugheit	Secretiveness
7	Sentiment de la propriété	Eigenthumsinn	Acquisitiveness
8	Orgueil, fierté, hauteur	Stolz, Hochmuth, Herschsucht	Self-Esteem
9	Vanité, ambition, amour de la gloire	Eitelkeit, Ruhmsucht, Ehrgeitz	Love of Approbation

APPENDIX B: PART I (Continued)

Organ Number	French Names	German Names	English Names
10	Circonspection, pervovance	Behutsamkeit, Vorsicht, Vorsichtigkeit	Cautiousness
11	Mémoire des choses, mémoire des faits, sens des choses, éducabilité, perfectibilité	Sachgedaechtniss, Erziehungs-Faehigkeit	Eventuality and Individuality
12	Sens des localités, sens des rapports de l'espace	Ortsinn, Raumsinn	Locality
13	Mémoire des personnes, sens des personnes	Personensinn	Form
14	Sens des mots, sens des noms, mémoire des mots, mémoire verbale	Wort-Gedaechtniss	Language
15	Sens du langage de parole, talent de la philologie	Sprach-Forschungssinn	Held by Dr. Spurzheim to be included in the preceding organ

16	Sens des rapports des couleurs, talent de la peinture	Farbensinn	Colouring
17	Sens des rapports des tons, talent de la musique	Tonsinn	Tune
18	Sens des rapports des nombres	Zahlensinn	Number
19	Sens de méchanique, sens de construction, talent de l'architecture	Kunstsinn, Bausinn	Constructiveness
20	Sagacité comparative	Vergleichender-scharfsinn	Comparison
21	Esprit metaphysique, profondeur d'esprit	Metaphysischer-Tiefsinn	Causality
22	Esprit caustique, esprit de saillie	Witz	Wit
23	Talent poétique	Dichter-Geist	Ideality
24	Bonte, bienveillance, douceur, compassion	Gutmuethigkeit, Mitleiden	Benevolence
25	Faculté d'imiter, mimique	Darstellungssinn	Imitation

APPENDIX B: PART I (Continued)

Organ Number	French Names	German Names	English Names
26	Sentiment religieux	Theosophie	Generation
27	Fermeté, constance, persévérance	Festigkeit	Firmness

SOURCES: G. Combe, A System of Phrenology (New York, 1843), p. 481, and N. Capen, "Biography of Spurzheim," in Phrenology in Connexion With the Study of Physiognomy by J. G. Spurzheim (Boston, 1833), p. 156.

APPENDIX B: PART II

NAMES, ORDER, AND GENERA OF THE MENTAL FACULTIES ACCORDING TO DR. SPURZHEIM

Special Faculties of the Mind.

ORDER I.--Feelings, or Affective Faculties.

GENUS I.--Propensities.

+Desire to live. *Alimentiveness. 1. Destructiveness. 2. Amativeness. 3. Philoprogenitiveness. 4. Adhesiveness. 5. Inhibitiveness. 6. Combativeness. 7. Secretiveness. 8. Acquisitiveness. 9. Constructiveness.

GENUS II.--Sentiments.

10. Cautiousness. 11. Approbativeness, 12. Self-esteem. 13. Benevolence. 14. Reverence. 15. Firmness. 16. Conscientiousness. 17. Hope. 18. Marvellousness. 19. Ideality. 20. Mirthfulness. 21. Imitation.

ORDER II.--Intellectual Faculties. GENUS I.--External Senses.

Voluntary motion. Feeling. Taste. Smell. Hearing. Sight.

GENUS II.--Perceptive Faculties.

22. Individuality. 23. Configuration. 24. Size 25. Weight and resistance. 26. Coloring. 27. Locality. 28. Order. 29. Calculation. 30. Eventuality. 31. Time. 32. Tune. 33. Artificial language.

GENUS III.--Reflective Faculties.

34. Comparison. 35. Causality.

SOURCE: N. Capen, "Biography of Spurzheim," in J. G. Spurzheim, Phrenology in Connexion With the Study of Physiognomy (Boston, 1833), p. 157.

APPENDIX B: PART III

SPURZHEIM'S EXPLANATIONS OF THE MENTAL FACULTIES

*	Desire to Live	A peculiar instinct to live, or the love of life.
+	Alimentiveness	The desire to take food, the instinct to feed.
1.	Destructiveness	The propensity to Destroy.
2.	Amativeness	Physical love.
3.	Philoprogenitiveness	A particular feeling which watches over and provides for helpless offspring, or parental love.
4.	Adhesiveness	Friendship, i.e., some particular instinct which produces various interpersonal attachments.
5.	Inhabitiveness	The instinct that prompts one to select a particular dwelling, often called attachment to home.
6.	Combativeness	The disposition to quarrel and fight, pugnacity.
7.	Secretiveness	The Propensity to Conceal, predisposes the individual to Cunning and Slyness.
8.	Acquisitiveness	The Propensity to Acquire, i.e., a desire for hoarding and collecting.
9.	Constructiveness	By means of this faculty man constructs. It is essential in every mechanical profession including the arts of drawing, engraving, writing, carving, and sculpture.
10.	Cautiousness	This organ incites us to take precautions and be doubtful and cautious.

APPENDIX B: PART III (Continued)

11.	Approbativeness	This faculty seeks the approbation of others. It makes us attentive to the opinion entertained by others of ourselves.
12.	Self-esteem	This sentiment gives us a great opinion of ourselves, constituting self-love or self-esteem.
13.	Benevolence	This fundamental power produces mildness and goodness, benignity, clemency, mercifulness, compassion, kindness, humanity and cordiality.
14.	Reverence	By this organ's agency man adores God, venerates saints, and respects persons and things.
15.	Firmness	This faculty gives constancy and perseverance to the other powers, contributing to maintain their activity.
16.	Conscientiousness	This organ produces a feeling of justice and conscientiousness, or the love of truth and duty.
17.	Hope	Hope induces a belief in the possibility of whatever the other faculties desire, i.e., it inspires optimism regarding future events.
18.	Marvellousness	This sentiment inspires belief in the true and the false prophet, aids superstition, but is also essential to the belief in the doctrines of religion. This feeling may be applied both to natural and supernatural events, and in every case fills the mind with amazement and surprise.

APPENDIX B: PART III (Continued)

19.	Ideality	This faculty vivifies the other faculties, and impresses a peculiar character called poetical or ideal. Great poets have this organ greatly developed.
20.	Mirthfulness	This is an affective faculty which disposes men to view very thing in a gay, joyful and mirthful manner. It may be applied to words, to things, to ideas, to arts, and to every mental manifestation. Hence the different names it receives from its modified functions, such as wit, good-humor, caricature, mockery and irony.
21.	Imitation	This organ produces a fondness for acting and for dramatic representation. Individuals with this faculty large often imitate gestures, voices, manners, and in general, all the behavioral manifestations of man and animals.
22.	Individuality	This faculty contributes to the recognition of the existence of individual beings, and facilitates the embodiment of several elements into one being or object, as a tree, a house, or a man. The activity and presence of this organ's activity is denoted by substantives, or abstract terms in language, and which in all probability constitutes the personal identity of objects, i.e., its activity facilitates concept formation.

APPENDIX B: PART III (Continued)

23.	Configuration	This faculty takes cognizance of configuration generally, and in one of its special applications or offices it facilitates the recollection of persons (for persons are known by their forms). This power disposes us to give a figure to every being and conception of our minds, e.g., that of an old man, God, death, that of a skeleton, and so on.
24.	Size	This organ provides notions of the dimensions or size of external objects.
25.	Weight and Resistance	This faculty procures the knowledge of the specific gravity of objects, and is of use whenever weight or resistance are worked upon with the hands, or by means of tools.
26.	Coloring	This organ cognizes, recollects, and judges the relations of colors.
27.	Locality	This faculty conceives of the places occupied by the objects that surround us. It provides also for notions of localities and places.
28.	Order	This faculty gives method and order to objects only as they are physically related. It creates a fondness for putting particulars in order according to their size and form, and in natural history, animals according to their configuration (q.v.).
29.	Calculation	Whatever concerns unit, plurality, or number, belongs to this faculty. Its end is calculation in general.

APPENDIX B: PART III (Continued)

30.	Eventuality	This faculty recognizes the activity of every other, whether external or internal, and acts in its turn upon all of them. It desires to know everything by experience, and consequently excites all the other organs to activity. It is fond of general instruction, and inclines to the pursuit of practical knowledge. By knowing the functions of the other powers, this faculty and individuality (q.v.) contribute essentially to the unity of conscicusness, and to the recognition of the entity myself in philosophy.
31.	Time	The faculty of time conceives the duration of phenomena, their simultaneousness, or succession.
32.	Tune	The organ of tune bears to the ears the same relation as coloring (q.v.) does to the eyes. This may be called the organ of musical perception.
33.	Artificial Language	The memory of words and philology in general, depend on this special faculty.
34.	Comparison	This faculty compares the sensations and notions excited by all other faculties, points out their similitudes, analogies, differences or identity, and comprehends their relations, harmony, or discord.

APPENDIX B: PART III (Continued)

35. Causality	The effects of causality are immense: the cultivation of fields, plantation of trees, all the artificial enjoyments of the external and internal senses, the invention of instruments of all kinds, in short all which man produces by art, depends on this faculty. It is the fountain of resources.

SOURCE: J. G. Spurzheim, Phrenology or The Doctrine of the Mental Phenomena (Philadelphia, 1908 [1833]), pp. 160-346.

APPENDIX B: PART IV

COMPARATIVE CHART OF THE MENTAL FACULTIES ACCORDING TO GALL AND SPURZHEIM, THEIR NAMES, ASSIGNED NUMBERS, AND CRANIAL AND CORTICAL LOCATIONS

Gall's System		Spurzheim's System		Anatomical Locations
Organ Number	Organ Names	Organ Number	Organ Names	
1	German: Zegunstrib French: Organe de l'amour physique; ou de la propagation; ou de la copulation; ou de la génération; ou de la reproduction, ou instinct vénérien. English: Organ of reproduction; instinct of generation; venereal propensity; etc.	2	Amativeness	Cortical: Cerebellum.[1] Cranial: On either side of the midline below the inion (external occipital protuberance). When much developed, forms two prominences, one on each side above the hollow of the neck. Brodmann No.:[2] Not Applicable. Von Economo Letters:[2] Not Applicable.

[1]All cortical locations are approximate, i.e., are in the immediate area of the localizations designated, and are based on an examination of the anatomical plates of Gall and Spurzheim, and current anatomical charts. Due to inconsistencies in numbering by Gall and Spurzheim, and differences in appearances of the old and new diagrams of the brain any greater exactitude is not possible.

[2]Illustrated in J. G. Chusid and J. J. McDonald, Correlative Neuroanatomy and Functional Neurology (Los Altos, Cal., 1967), p. 12.

APPENDIX B: PART IV (Continued)

Gall's System		Spurzheim's System		Anatomical Locations
Organ Number	Organ Names	Organ Number	Organ Names	
2	German: Jungenliebe; Kinderliebe; etc. French: Organe de l'amour maternel; ou du penchants pour les petits; amour de la progéniture; amour des parens pour leurs enfans; etc. English: Love of children, especially one's offspring; organ of maternity; maternal love; love of progeny; etc.	3	Philoprogenitiveness	Cortical: Lower part of the occipital lobe near and on either side of the midline; immediately above the preceding organ. Cranial: Above the inion and below the lamda on either side of the midline of the occipital bone. Brodmann No.: Area 17. Von Economo Letters: Area OC.
3	German: Anhaenglichkeit French: Organe de l'attachement amical; amitié; etc.	4	Adhesiveness	Cortical: In the area of the lobulus parietalis, inferior, and posteriad from it. Cranial: Like the preceding organs, this

	English: Sense of sympathies; disposition to be come attached to certain objects; friendships; etc.			one is double and forms a protuberance on either side of the cranium. Located above and laterad from the preceding and situated over the lambdoid suture on either side of the skull. Brodmann No.: Near Area 39. Von Economo Letters: Area PG.
4	German: Muth; Raufsinn; etc. French: Instinct de la défense de soi-même et celle de sa propriéte; organe du courage; penchant aux rixes et aux combats; pugnacité; etc. English: Instinct of self-defense; disposition to quarrel; courage; propensity for strife; etc.	6	Combativeness	Cortical: Posteriad on the inferior temporal gyrus. Cranial: Behind the ears, superiad and frontad from the asterion. Brodmann No.: In the vicinity of 18-19. Von Economo Letters: In the vicinity of OB-OA.

Gall's System		Spurzheim's System		Anatomical Locations
Organ Number	Organ Names	Organ Number	Organ Names	
5	German: Wuergsinn French: Instinct carnassier; instinct à tuer et à detruire; penchant au meurtre; cruaute; instinct de la destruction; etc. English: Instinct to kill and destroy; sanguinary propensity; instinct of destruction; etc.	1	Destructiveness	Cortical: Anteriad from the preceding organ, on the superior part of the inferior temporal gyrus. Cranial: The temporo-parietal region, immediately above and behind the auditory meatus. Brodmann No.: Area 21. Von Economo Letters: Superiad and posteriad to TE.
6	German: List; Schlauheit; Klugheit; etc. French: Organe de la ruse, de la finesse et du savoire-faire;	7	Secretiveness	Cortical: Medial, on the superior temporal gyrus. Cranial: It is said to form on the head and cranium a prominence swelling out and extending longitudinally from

	instinct à cacher; esprit d'intrigue; etc. English: Cunning; trickery; cheating; etc.			behind forwards, and terminating above an inch from the upper superciliary arch; a little in front, and above the preceding organ, of oblong form, giving fullness to the temples. Brodmann No.: 41 Von Economo Letters: TC.
7	German: Eigenthuemsinn; Hang zu Stehln; etc. French: Sentiment de la propriété; instinct de faire provisions; désire d'avoir; convoitise; penchant au vol; etc. English: Propensity to steal; love of property; covetousness; etc.	8	Acquisitiveness	Cortical: At the superior anterior-most portion of the temporal lobe. Cranial: The upper edge of the front half of the squamosal suture. When very much developed, it is said to produce a prominence on the head and skull extending in a longitudinal direction, from the preceding organ to the outer angle of the superciliary arch. Brodmann No.: Superiad and anteriad from 22. Von Economo Letters: TA

APPENDIX B: PART IV (Continued)

Gall's System		Spurzheim's System		Anatomical Locations
Organ Number	Organ Names	Organ Number	Organ Names	
8	German: Stolz; Hochmuth; Herschsucht; etc. French: Orguel; hauteur; fierté; arrogance; bonne opinion de soi-même, esprit de domination, penchant à commander; etc. English: Pride; self-esteem; hautiness; spirit of domination; love of independence; etc.	12	Self-esteem	Cortical: In the superior parietal lobule near the mid-line; extends into the longitudinal fissure near the paracentral lobule. Cranial: Directly behind and beneath the summit of the head; it is manifested, theoretically, on the surface of the skull by one elongated protuberance although there is really one in each hemisphere; when the hemispheres are a little separated, it is supposed to appear double on the surface. At or near the obelion. Brodmann No.: In area of 2. Von Economo Letters: In area of PD.

9	German: Eitelkeit; Ruhmsucht; Ehrgeitz; Beifallsliebe; etc. French: Vanité; ambition; amour de la glorie; coquetterie; amour des distinctions; etc. English: Love of glory and distinction; ambition; vanity; desire to please; etc.	11	Approbativeness	Cortical: Located in the superior parietal lobule, external to self-esteem; posterior to and at the junction of, the post-central sulcus and the intraparietal sulcus, anterior and inferior to self-esteem. Cranial: Ostensibly manifested on the cranium by two large prominences, projecting like the segment of a sphere, situated by the side of the oval elongated previous organ. On the parietal bones, at about 1/3 the distance between the parietal and the tempero-parietal suture, reckoning from the former. Brodmann No.: In the area of 5. Von Economo Letters: In the area of PEm.

APPENDIX B: PART IV (Continued)

Gall's System		Spurzheim's System		Anatomical Locations
Organ Number	Organ Names	Organ Number	Organ Names	
10	German: Behutsamkeit; Vorsicht; Vorsichtigkeit; etc. French: Prévoyance; Inquiétude; Craint; Irrésolution; Mélancolie; etc. English: Cautiousness; prudence; inquietude; fear; melancholy; etc.	10	Cautiousness	Cortical: The convolutions in the area of the supra marginal gyrus constitute the surface or final expansion of this organ. Cranial: Ostensibly a large development of these convolutions raises the superior-posterior outer portion of the parietal bone into a lateral prominence so to the touch the head presents a very broad surface in its superior-posterior lateral region. Brodmann No.: In area of 39. Von Economo Letters: In area of PF.

11	German: Sachegedaechtniss; Erziehungs-Faehigkeit; etc. French: Sens des choses; mémoire des faits; éducabilité; perfectibilité; etc. English: Memory of facts; memory of things; perfect-ibility; curiosity; decided talent for teaching; etc.	22	Individuality (Spurzheim "Sub-divided" this into "individuality" [his #22], "eventuality" [his #30], and "weight" [his #25]. To be discussed).	Cortical: Located at the ventral portion of the polus frontalis near the midline; i.e., at the end of the first frontal convolution. Cranial: Over the frontal sinus in the midline between (roughly) the nasion and the glabella. Heart shaped in Gall's topography. Brodmann No.: In area of 11. Von Economo Letters: In area of FG.
12	German: Ortsinn; Raumsinn; etc. French: Organe des localitiés, ou des rapports de l'espace; cosmopolisme; mémoire des lieux; penchant au vagabondage; etc. English: Organ of locality; relations of distances; recollection of places; etc.	27	Locality (Spurzheim divided this into "Locality" [his #27] and "Size" [his #24]. To be discussed).	Cortical: Frontad on the middle orbital gyri. Cranial: Laterad and inferiad from the pre-vious organ, a little above the eyebrows and on either side of the midline. Brodmann No.: In area of 11. Von Economo Letters: In area of FG.

APPENDIX B: PART IV (Continued)

Gall's System		Spurzheim's System		Anatomical Locations
Organ Number	Organ Names	Organ Number	Organ Names	
13	German: Personen-Sinn French: Faculté de conserver le souvenir des personnes, et de reconnaître aisément celles que nous avons vues; mémoire des personnes; etc. English: Memory of persons; particular talent of seizing the form of things; disposition to collect prints and portraits; etc.	23	Configuration	Cortical: On the anterior portion of the gyrus rectus, medial to the olfactory sulcus, and continuous with the superior frontal gyrus on the medial surface. Cranial: When the internal angle of the eye is somewhat depressed, this organ is said to be present. Brodmann No.: None. Von Economo Letters; None.

14	German: Wort-gedaechtniss French: Facilité prodigieuse à retiner des noms et des signes; mémoire verbale; sens des mots; disposition à parler; etc. English: Verbal memory; sense of words; disposition to prefer such studies as require a great number of names; etc.	33	Language (Spurzheim admits only one organ of language and credits Gall with the discovery of 26 rather than 27 faculties).	Cortical: Posteriad and laterad from the gyri orbitales on the ventral surface of the brain. Cranial: Ostensibly, large and prominent eyes, having the external commissure of the eyelids and the ball itself turned somewhat downwards, indicate this faculty. Thus when these convolutions are very much developed, that part of the sphenoid, which forms the posterior third of the external wall of the orbit, is said to be pushed forward, diminishing the depth of the orbit, and rendering the eyeball prominent. Brodmann No.: None. Von Economo Letters: None.

APPENDIX B: PART IV (Continued

Gall's System		Spurzheim's System		Anatomical Locations
Organ Number	Organ Names	Organ Number	Organ Names	
15	German: Sprach-Forschungssinn French: Sens du langage de parole; talent de la philologie; etc. English: Faculty of spoken language; talent of philology; etc.	33	Language (see note to preceding entry).	Cortical: The middle portion of the inferior anterior orbital gyri. Cranial: It is held that when this is greatly developed, it flattens and depresses the roof of the orbit resulting in a "peculiar" position of the eyes. The eyes are prominent and depressed toward the cheek. A large cavity is produced and given the appearance in the living subject of a "little pouch filled with water, and hence the name eyes with pouches." Brodmann No.: None. Von Economo Letters: None.

16	German: Farbensinn French: Sens des rapport des couleurs; faculté de saisir les couleurs, leurs nuances, et de les distinguer clairment les unes des autres; etc. English: Sense of the relation of colors; etc.	26	Coloring	Cortical: Anteriad in the middle orbital convolution. Cranial: On the orbital edge in the center above the eye, laterad from faculty No. 12. Brodmann No.: None. Von Economo Letters: None.
17	German: Tonsinn French: Talent de la musique, et aptitute à sentir les consonnances et les dissonnances musicale; dispositions à chanter; mémoire des tons; etc. English: Talent for music; faculty of perceiving the relation of tones; etc.	32	Tune	Cortical: On the lower portion of the polus frontalis, where the brain rests on the external angle of the orbital plate. Cranial: Laterad from the preceding organ on the outer ridge of the superior portion of the orbit near the outer edge of the eyebrow. Brodmann No.: Posteriad and superiad from 10. Von Economo Letters:Posteriad and superiad from FE.

APPENDIX B: PART IV (Continued)

Gall's System		Spurzheim's System		Anatomical Locations
Organ Number	Organ Names	Organ Number	Organ Names	
18	German: Zahlensinn French: Sens des rapports et des propriétes des nombres; esprit de calcul; talent des mathématiques; etc. English: Sense of the relations and properties of numbers; love of calculation; talent for mathematics; etc.	29	Calculation [out of this Spurzheim postulated "numeration," "number," i.e., "calculation" (#29); "order" (#28) and "time" (#31)].	Cortical: At the outer most portion of the orbital convolutions, inferiad on the polus frontalis located at the lower most convolution of the preceding organ. Cranial: The most external lateral portion of the orbital plate. Topologically below the preceding organ near the temporal canthi. Brodmann No.: 10 Von Economo Letters: FE.

19	German: Kunstsinn French: Sens de la mécanique et des constructions; organe des arts et de l'industrie; dextérité; etc. English: Sense of mechanics and construction; dexterity; organ of the arts; etc.	9	Constructiveness	Cortical: Inferiad on the gyrus frontalis medius [Gall placed it above acquisitiveness; Spurzheim moved it at least once as one can gather from the accuracy of their anatomical plates]. Cranial: Location unclear; see statement above. Somewhere between the upper portion of the zygomatic arch on the skull, anteriad on the sphenoid bone, and dorsad toward the pterion. Brodmann No.: In area of 45 and 47. Von Economo Letters: FDr.
20	German: Vergleichender-Scharfsinn French: Sagacité comparative; vivacite d'esprit; perspicacité comparative; etc.	34	Comparison	Cortical: On the middle cerebral part of the anterior superior portion of the frontal lobes. Cranial: In the midline immediately above the glabella, conical in form. Brodmann No.: In area of 9 toward the midline.

APPENDIX B: PART IV (Continued)

Gall's System		Spurzheim's System		Anatomical Locations
Organ Number	Organ Names	Organ Number	Organ Names	
20	English: Aptitude for drawing comparisons; quickness of apprehension; etc.	34	Comparison	Von Economo Letters: None
21	German: Metaphysicher; Tiefsinn; etc. French: Pénétration metaphysique; raison des choses; etc. English: Aptitude to view persons and things in a pleasant point of view; talent for wit and repartee; etc.	35	Causality	Cortical: On the middle cerebral part of the anterior superior portion of the frontal lobes, laterad from the preceding organ. Cranial: Laterad from the midline immediately above the glabella, on either side of the preceding organ. Brodmann No.: In vicinity of 9. Von Economo Letters: None.

22	German: Witz French: Esprit caustique; l'esprit de saillie et répartie; etc. English: Wit; gaiety of character; propensity for satire; etc.	20	Wit [1815 ed.]; Mirthfulness [1832]	Cortical: On the superior lateral anterior portion of the superior frontal gyrus. Cranial: When well developed, the superior lateral parts of the forehead are, ostensibly, prominent toward the outer edge of the frontal bone, above the orbits. Brodmann No.: Laterad from 9. Von Economo Letters: None.
23	German: Dichter-Geist French: Talent poetique; organe de la poesie; chaleur imagination; etc. English: Poetic talent; imagination; etc.	19	Ideality (Spurzheim did not admit an organ of poetry).	Cortical: The middlemost lateral portion of the gyrus frontalis medius. Cranial: Ostensibly, from above the temples extending obliquely from below upward, and from before backward for about two inches. Brodmann No.: None. Von Economo Letters: In area of FD^{4}.

APPENDIX B: PART IV (Continued)

Gall's System		Spurzheim's System		Anatomical Locations
Organ Number	Organ Names	Organ Number	Organ Names	
24	German: Gutmuethigkeit; mitleiden; moralishersinn; gewissen; etc. French: Bonté; beinveillance; douceur; compassion; sensibilité, sens moral; conscience; etc. English: Goodness; benevolence; gentleness; compassion; sensibility; moral sense; etc.	13	Benevolence	Cortical: On the superior frontal portion of the cortex, anteriad from the labulus paracentralis, on either side of the midline. Cranial: Just anterior to the bregma on the midline dorsad from Gall's No. 20, under the hairline, just above the forehead. Brodmann No.: Mediad from 8. Von Economo Letters: Mediad from FC.
25	German: Darstellungsinn; etc.	21	Imitation	Cortical: Spurzheim places this laterad from the preceding organ. Gall places it more anterior and inferior to the preceding.

	French: Faculte d'limiter; mimique; etc. English: Mimicry; faculty of imitation; etc.			Cranial: Dorsad and laterad from Gall's No. 22 in his system, but lower on the frontal bone than Spurzheim's. Spurzheim places it immediately laterad from the preceding organ. Brodmann No.: In the area of 8. Von Economo Letter: In area of FC.
26	German: Theosophie; etc. French: Sentiment religieux; organe de théosophie; Dieu et la religion; etc. English: Organ of theosophy; religious sentiment; God and religion; etc.	14	Reverence	Cortical: On the superior-most portion of the cortex, on either side of the midline, roughly in the area of the superior portion of the lobulus paracentralis. Cranial: On either side of the midline, at the crown of the head posteriad from the bregma. Brodmann No.: In the area of 6-4. Von Economo Letter: In the area of FB-FA.

APPENDIX B: PART IV (Continued)

Gall's System		Spurzheim's System		Anatomical Locations
Organ Number	Organ Names	Organ Number	Organ Names	
27	German: Festigkeit; etc. French: Fermenté; constance; perseverance; opiniâtrete; etc. English: Firmness of character; purpose; constancy; etc.	15	Firmness	Cortical: Posteriad from the preceding organ, on either side of the midline, on the superior most portion of the precuneus. Cranial: Posteriad from the preceding, on either side of the midline, anteriad from the lambda on the saggital suture. Brodmann No.: Near areas 1-2-3 on the midline. Von Economo Letters: Near areas PB-PC-PD.

The Following Organs are Those Which
Were Not Admitted by Gall, but were, Rather, Those Added by Spurzheim

--	[Gall included this organ in No. 8, "Self-esteem." What Spurzheim calls "inhabitiveness," Gall saw operating only in animals as "aufenthaltssinn."	5	Inhabitiveness	Cortical: on the inferior portion of the occipital lobe on either side of the midline. Cranial: Below the lambda, on either side of the midline, above Gall's No. 2 Brodmann No.: None. Von Economo Letters: Mediad from PE.

APPENDIX B: PART IV (Continued)

Gall's System		Spurzheim's System		Anatomical Locations
Organ Number	Organ Names	Organ Number	Organ Names	
--	[Included by Gall in his No. 24, "benevolence."]	16	Conscientiousness	Cortical: On the superior posterior portion of the post central gyrus. Cranial: Posterior from the coronal suture between Spurzheim's Nos.17 (at the anterior side) and 11 at the posterior. Bordered by "firmness" at the top. Brodmann No.: Near 1-2. Von Economo Letters: Near PC-PD.
--	[Gall considered this as a function of every faculty.]	17	Hope	Cortical: In the vicinity of the superior portion of the gyrus precentralis. Cranial: Anteriad from but in line with the preceding organ, almost on the saggital suture. Bordered by "firmness" at the top and "acquisitiveness" at the bottom.

				Brodmann No.: In area of 4. Von Economo Letters: FA.
--	--	18	Marvellousness	Cortical: On the frontal lobes, just anterior to the preceding organ, and just anterior to the precentral sulcus. Cranial: Anterior to the preceding organ, under the upper and lateral portion of the frontal bone. Brodmann No.: Laterad and inferiad from 6. Von Economo Letters: Laterad and inferiad from FB.

APPENDIX B: PART IV (Continued)

Gall's System		Spurzheim's System		Anatomical Locations
Organ Number	Organ Names	Organ Number	Organ Names	
--	--	24	Size	Cortical: Anterior to "configuration" on the gyrus rectus on the ventral surface of the brain. Cranial: On either side of "individuality" and above "configuration" at the internal angle of the orbit. Brodmann No.: None Von Economo Letters: None.
--	--	25	Weight and Resistance	Cortical: Anteriad from the preceding organ on the anterior most portion of the gyrus rectus. Cranial: Laterad from the preceding organ toward the superciliary ridge. Brodmann No.: None. Von Economo Letters: None.

--	--	28	Order	Cortical: On the anterior portion of the most lateral orbital gyri. Cranial: On the orbital ridge between "coloring" - which is laterad from "weight and resistance" - and "calculation" - which is at the temporal canthi. Brodmann No.: None. Von Economo Letters: None.
--	[cf. Gall's No. 11.]	30	Eventuality	Cortical: At the inferior portion of the frontal gyrus toward the midline. Cranial: Between the nusion and the glabella - Gall's No. 11. Brodmann No.: Superior to 10. Von Economo Letters: Superior to FE.

APPENDIX B: PART IV (Continued)

Gall's System		Spurzheim's System		Anatomical Locations
Organ Number	Organ Names	Organ Number	Organ Names	
--	[Gall discusses this but is uncertain that it has been "established."]	31	Time	Cortical: On the frontal lobes. Cranial: Immediately above "coloring," on the forehead, bordered by "locality" toward the midline, by "mirthfulness" toward the posterior, by "tune" toward the lateral, and by coloring which is inferiad from it. Brodmann No.: Near 10. Von Economo Letters: Near FE.

APPENDIX C

REPRESENTATIVE PHYSIOGNOMY RELATED LITERATURE IN PSYCHOLOGY, THE 1960's:

Bailey, M. A., et al. "Differences in Trait Attribution by Patient and Normal Groups to Line Drawings of Human Facial Pictures." J. Clin. Psychol. 23 (1967):104-108.

Beloff, J. and Beloff, H. "The Influence of Valence on Distance Judgments of Human Faces." J. Abnorm. Soc. Psychol. 62 (1961):720-722.

Boucher, J. D. "Facial Displays of Fear, Sadness and Pain." Percep. Motor Skills 28 (1969):239-242.

Brooks, R. M. and Goldstein, A. G. "Recognition by Children of Inverted Photos of Faces." Child Develop. 34 (1963):1033-1040.

Broussard, L. M., et al. "Comparative Reinforcing Effect of Eight Stimulations on the Smiling Response of Infants." J. Child Psychol. Psychiat. All. Discip. 9 (1968):51-59.

Defares, P. B. and van der Werff, J. J. "Perception and Mental Assimilation of Significant Expressions." Nederlandsch Tijdschrift voor de Psychologie en haar Grensgebieden 17 (1962):485-498.

Efran, J. S. "Looking for Approval: Effects on Visual Behavior of Approbation from Persons Differing in Importance." J. Pers. Soc. Psychol. 10 (1968):21-25.

Ekman, P. "Body Position, Facial Expression, and Verbal Behavior During Interviews." J. Abnorm. Soc. Psychol. 68 (1964):295-301.

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APPENDIX D

SPURZHEIM CHRONOLOGY

1776. Johann Christoph Spurzheim is born 31 December.

1791 Spurzheim matriculates at the University of Treves.

1796. Gall delivers his first private course in Vienna.

1799. The Republican Armies of France overrun the south of Germany--Spurzheim leaves for Vienna and becomes the private tutor to the children of Count Splangen (Some sources have him leaving for Vienna in 1792 or 1797.

1800. Spurzheim attends Gall's lectures for the first time as an auditor.

1802. The Government of Austria interdicts Gall's lectures 9 January.

1804. Spurzheim is no longer simply an auditor at Gall's lectures, he now takes the role of an associate.

1805. Gall and Spurzheim leave on their European tour, stopping first at the home of Gall's parents in Tiefenbrun near Pforsheim, in Swabia, then going directly to Berlin, their first stop.

1807. Gall's and Spurzheim's European tour ends when they arrive in Paris. Gall delivers first lectures there in November.

1808. Gall and Spurzheim present their Mémoire to the French Institute 14 March.

MM. Sabatier, Tenon, Portal, Pinel and Cuvier are charged with the reading of Gall and Spurzheim's Mémoire and to report back to the Institut, 21 March.

MM. Sabatier, Tenon, Portal, Pinel and Cuvier present their report on Gall and Spurzheim's Mémoire, 18 April.

1809. MM. Sabatier, Tenon, Portal, Pinel and Cuvier have their report on Gall and Spurzheim's Memoire published in English Edinburgh Med. Surg. J. 5 [January, 1809]:36-66.

Gall and Spurzheim publish Recherches sur le Système Nerveux en Général et sur Celui du Cerveau en Particulier; Mémoire Presenté a l'Institut de France, le 14 Mars 1808; Suivi d'Observations sur le Rapport qui en a été fait a Cette Compagnie par ses Commissaires, Paris, 1809.

1810. Gall publishes the first part of his magnum opus with Spurzheim collaborating on the first two volumes plus the Atlas, viz., Anatomie et Physiologie du Systeme Nerveux en General, et du Cerveau en Particuler, Paris.

1811. Gall and Spurzheim issue Des Dispositions Innées de l'Âme et de l'Esprit, du Matérialisme, du Fatalisme et de la Liberté Morale, Avec des Reflexions sur l'Education et sur la Legislation Criminelle, Paris.

1813. Spurzheim and Gall part company. Spurzheim goes to Vienna to be awarded his M. D. degree.

1814. Spurzheim arrives in England and begins lecturing in London at the Medico-Chirugical Society's Lincoln's Inn Fields.

1815. Spurzheim publishes 1st edition of his The Physiognomical System of Drs. Gall and Spurzheim; Founded on an Anatomical and Physiological Examination of the Nervous System in General, and of the Brain in Particular, and Indicating the Dispositions and Manifestations of the Mind, London, early in the year.

Spurzheim residing at 11, Rathbone Place, London, issues a second edition of The Physiognomical System 15 June.

Dr. John Gordon writes his critical review of The Physiognomical System and Gall and Spurzheim's Anatomie in the June number of The Edinburgh Review.

Spurzheim publishes a small volume entitled Outlines of the Physiognomical System of Drs. Gall and Spurzheim: Indicating the Dispositions and Manifestations of the Mind, London.

1815. Thomas Forster, a friend of Spurzheim's, publishes Sketch of the New Anatomy and Physiology of the Brain and Nervous System of Drs. Gall and Spurzheim, Considered as Comprehending a Complete System of Phrenology, using "phrenology" for the first time in its as yet to become popular sense.

Spurzheim goes to Bath, Bristol, Cork and then Dublin, delivering at least three lectures in the latter city, November.

1816. Spurzheim visits Cork, Ireland and delivers two lectures in January.

Spurzheim returns to Dublin and delivers two more concurrently delivered courses there, February.

Spurzheim leaves for Liverpool remaining for two months. Again a series of lectures were given, March.

Spurzheim visits the "public institutions" of Manchester and Lancaster, May.

Spurzheim takes an extensive tour of Scotland, by Glasgow, Dumbarton, Iverness, Banff, Aberdeen, Perth, and Stirling to Edinburgh, arriving 24 June.

Spurzheim calls on Dr. John Gordon (the "Edinburgh Reviewer") twice before Gordon reluctantly sees him. He also calls on Lord Jeffrey, the editor of The Edinburgh Review in June.

Spurzheim views his demonstrations in Edinburgh a success. Two public courses are delivered in Edinburgh around this time, 23 September.

Spurzheim attempts in vain to see Dugald Stewart, and then returns to London, but continues to lecture in other cities of the commonwealth, Fall.

1817. Spurzheim publishes Examination of the Objections Made in Britain Against the Doctrines of Gall and Spurzheim (Edinburgh) in reply to a vituperative pamphlet attack by Dr. John Gordon.

The satirical but critical publication entitled The Craniad: on Spurzheim Illustrated! A Poem is issued anonymously in Edinburgh.

1817. Spurzheim publishes the first edition of his Observations on the Deranged Manifestations of the Mind or Insanity in London.

Spurzheim returns to Paris and begins a series of lectures each lasting 3 months, July.

1818. Spurzheim decides to settle in Paris and there marries Mademoiselle Perier.

Spurzheim uses phrenology for the first time in the title of one of his personally authored works, viz., Observations sur la Phraenologie, ou la Connaissance de l'Homme Moral et Intellectuel, Fondée sur les Fonctions du Systeme Nerveux (Paris).

Craniology Burlesqued in Three Lectures, Humbly Recommended to the Patronage of Dr. Gall and Spurzheim is published in London.

Spurzheim correctly describes the character in life of a deceased patient of Dupuytren in Paris by an examination of the subject's brain alone, "as it lay, misshapen on a flat dish," 1 December.

1819. Spurzheim publishes Outlines of the Phrenological System of Drs. Gall and Spurzheim in London.

1820. Spurzheim publishes Essai Philosophique sur la Nature Morale et Intellectuelle de l'Homme in Paris.

George Combe, James Brownlee, Andrew Combe, William Waddell, Lindsey Mackersay, and the Rev. David Welsh form the first phrenological society in Edinburgh 22 February.

1821. Spurzheim publishes A View of the Elementary Principles of Education Founded on the Nature of Man in Edinburgh and his doctoral thesis, viz., Du Cerveau sous le Rapport Anatomique in Paris.

1824. The French government imposes restrictions of size on Spurzheim's public classes.

1825. Spurzheim publishes A View of the Philosophical Principles of Phrenology in London after having arrived there in March. He commences a course of eighteen lectures on phrenology at the Crown and Anchor Tavern, and several other courses on brain dissection on 15 March.

1825. Spurzheim starts a series of afternoon lectures in the "west end" of London, 7 April.

Spurzheim's A Philosophical Catechism of the Natural Laws of Man is published in London. This is followed by Phrenology, or the Doctrine of the Mind; and of the Relations Between its Manifestations and the Body (London), 3 May, and his Précis de Phraenologie, Contenant l'Explication du Buste (Paris).

1826. Phrenology Inconnexion with the Study of Physiognomy by Spurzheim is published (London), followed by his The Anatomy of the Brain, With a General View of the Nervous System (London).

Spurzheim visits Cambridge and delivers a course of lectures to (at the end of the series) 130 auditors.

1827. Early in this year Spurzheim proceeds to Bath and Bristol. Another series of lectures are given. He then takes a house in Gower Street, London, and commences lectures at Cambridge.

The English illustrator, caricaturist, and painter George Cruikshank (1792-1878) publishes his Phrenological Illustrations, or an Artist's View of the Craniological System of Doctors Gall and Spurzheim (London), satirizing Gall and Spurzheim's views, 1 August.

Spurzheim commences a course of lectures in "The London Institution." He then opens his phrenological collection for public inspection--Thursdays, from 2 to 4 o'clock, April--and then leaves for the "continent" remaining until October.

Spurzheim is back in England and lecturing at Hull. He visits the Refuge for the Insane, the grammar-school, and the "town-gaol" examining heads and delineating character, 6 December.

On 28 December he is honored at a dinner in Hull by "The Society for Phrenological Inquiry."

1828. Spurzheim arrives in Edinburgh and a lecture series is given. Sir William Hamilton declines George Combe's invitation for him to meet and debate with Spurzheim, January.

1828. Spurzheim writes to the editor of The Mercury publically inviting Sir William Hamilton to open debate. He repeats this five times but Sir William does not respond, 23 January.

Spurzheim is given a dinner at "Barry's Hotel, Prince's Street" by the phrenological society, 25 January.

He visits the "City Lunatic Asylum," and the "Hospital for the Children of Paupers" accompanied by Dr. Hunter, surgeon and phrenological examinations are made, 19 February.

Spurzheim's fifth request of Sir William to meet him "any day before the 6th of March" goes unanswered. The correspondence continued to 20 March to no avail, 28 February.

Spurzheim proceeds to Glasgow to begin a lecture series and then publishes A Sketch of the Natural Laws of Man in London, 23 June.

Gall dies, 22 August.

1829. Spurzheim lectures at Derby, Nottingham, Sheffield, Wakefield, Leeds, Manchester, Liverpool and other places. He lectured in Liverpool in May and June and Phrenological Societies were formed there.

Spurzheim reads a paper on the anatomy of the brain before the Royal Society including comments on Charles Bell's animadversions on phrenology, subsequently published in London in 1830.

In October, Spurzheim is in Manchester to visit a prison.

Spurzheim publishes Outlines of Phrenology, Being also a Manual of Reference for the Marked Bust (London).

1829-30. Spurzheim's wife dies.

1830. Spurzheim gives a series of lectures to the Phrenological Society of Dublin (which had been formed in 1829 at the close of a course on phrenology by George Combe). He is elected honorary member of the Royal Irish Academy in April.

1830. Spurzheim leaves Dublin and arrives in Belfast and gives a course in May or June.

Spurzheim returns to London and then moves on to Paris spending July, August and September there.

In November he leaves London and delivers a course of lectures at Liverpool.

He is refused lecture space in December at Oxford and decides to spend a month visiting friends in Liverpool, Manchester, and Derby.

Phrenology Article of the Foreign Quarterly Review, by Rich. Chenevix . . . With Notes from Spurzheim (London) is published.

1831. Spurzheim delivers lectures at the "Literary Institution" in Bath in January and at Derby in February.

He revisits Dublin to give another lecture series before the phrenological society. He hopes around this time to be appointed Professor of Anthropology at a "London College." He returns eventually to Paris when the appointment was not offered, April.

1832. Spurzheim publishes Manuel de Phrenologie in Paris and begins receiving invitations to visit the United States. He accepts them and sails from Le Havre, France for New York on 20 June.

Spurzheim arrives in New York, 4 August.

He leaves for New Haven, Connecticut that evening. There he attends the meeting of the "Society of the Alumni," at Yale and dissects the brain of a hydrocephalic child for the faculty, 11 August.

On 16 August he leaves for Hartford visiting the Asylum for the Deaf and Dumb and Retreat for the Insane with Amariah Brigham, 16 August.

Spurzheim arrives in Boston and takes lodgings at the Exchange Coffee House, 20 August, engaging permanent rooms at Mrs. LeKain's, Pearl Street, Boston, on the following day.

1832. He commences a course of eighteen lectures on phrenology, at the Athenaeum Hall, Boston and shortly after another series at Cambridge. Every other day, in the afternoons he delivers a course of five lectures before the "Medical faculty" on the anatomy of the brain, 17 September.

Spurzheim issues a Syllabus of a Demonstrative Course of Eighteen Lectures on Phrenology for his Boston audiences.

Spurzheim visits the "Monotorial School," following which his illness begins. From October 30th he is attended by Dr. James Jackson of Boston.

His condition worsens. 5 November was the date of the turning point of his condition according to his physicians.

His respiration reported to be hurried and irregular on 6 November.

Spurzheim dies at 11 o'clock, Saturday night, 10 November.

Preparations for his funeral are begun by a distinguished assemblage of Boston men, 11 November.

Spurzheim's funeral is held at the Old South Church, Boston. In the evening, of this day, the Boston Phrenological Society was formed, 17 November.

1832-33. 1st Amer. eds. of various works by Spurzheim are issued in Boston, viz.,

1. Phrenology, or the Doctrine of the Mental Phenomena, 2 vols.;
2. Phrenology in Connexion With the Study of Physiognomy;
3. Observations of the Deranged Manifestations of the Mind, or Insanity (with an Appendix by A. Brigham);
4. A View of the Elementary Principles of Education Founded on the Study of the Nature of Man;
5. Philosophical Catechism of the Natural Laws of Man;

1832-33. 6. Outlines of Phrenology! Being also a Manual of Reference for The Marked Bust;

7. Examination of the Objections Made in Great Britain Against the Doctrines of Gall and Spurzheim [bound with] Article of the Foreign Quarterly Review. By Rich. Chenevix . . . With Notes by Dr. Spurzheim;

8. The Anatomy of the Brain, With a General View of the Nervous System; and,

9. Sixty Phrenological Specimens Described by Dr. Spurzheim.

APPENDIX E

CRANIOMETRIC MEASUREMENTS OF THE SKULL OF SPURZHEIM

PUBLISHED IN 1835

Greatest circumference (measured horizontally).....22 1-4
..... length from occipital protuberance to the frontal sinuses.....7 1-2
Distance from occipital protuberance to the naso-frontal articulation, measured over the head.....13 6-10
..... from naso-frontal articulation to superior angle of the occipital bone.....7 1-10
..... from naso-frontal articulation to the anterior extremity of the sagittal suture.....4 6-10
..... from occipital protuberance to superior angle of the occipital bone.....2 8-10
..... from occipital protuberance to anterior extremity of the sagittal suture.....6 1-2
Greatest breadth of skull measured between the temporal bones 1 inch above the orifices of the ears.....6 1-4
Distance from mastoid process to mastoid process.....5 6-10
.... ear to ear.....4 1-2
.... naso-frontal articulation.....4 1-2
.... frontal sinuses.....4 8-10
.... anterior extremity of sagittal suture.....5 1-2
.... summit of head.....5 6-10
.... superior angle of occipital bone.....4 8-10
.... occipital protuberance.....4 1-4
.... ear over the summit of the skull in a vertical direction.....14
.... around the lower part of the forehead.....11 1-2
.... back of the skull at the occipital protuberance.....9 3-4
.... parietal protuberance to parietal protuberance.....5 1-2

APPENDIX E (Continued).

Distance between the anterior inferior angles of the parietal bones.....5 2-10
Camper's facial angle.....61 degrees.

SOURCE: N. B. Shurtleff, "Anatomical Report on the Skull of Spurzheim, Read Before the Boston Phrenological Society," Annals of Phrenology 2 (1835):74.

APPENDIX F

Proceedings of the Boston Phrenological Society, for the year 1835. Being a Report (unofficial) read to the Society, Jan. 14, 1836.

It has been suggested to the Secretary, by some members of the Society, that a sketch of the labors of the members, during the last year, would be particularly acceptable, as going to show that much has been done for the improvement of the members in the science of phrenology; and that no little has been attempted by the Society, towards perfecting the beautiful system which originated with Gall, and has been improved by Spurzheim and Combe. In consequence of these suggestions, your Secretary has copied from the records a brief list of the papers, reports, &c, which have been read before the Boston Phrenological Society, during the year 1835. It is as follows:--

Jan. 15.--A report was read by Mr Fowle, upon an unknown scull, presented to the Society by Dr Lewis. A paper was afterwards read from Dr Lewis, stating that the scull was that of the pirate Delgardo, who committed suicide in Leverett-street prison.

A report was read by Mr Sleeper, on a cast of the head of Henry Joseph, a negro, who was executed in this city for the murder of Capt. Crosby.

A paper was read by H. T. Tuckerman, in relation to Bulwer's 'Last Days of Pompeii,' going to show the opinions entertained and expressed, by the author, in favor of Phrenology.

Feb. 5.--A report was read by Mr Fowle, from the Committee appointed to examine and report upon a scull of some individual unknown to the Society, transmitted from the Phrenological Society, in South Reading.

Feb. 19.--A report was read by Dr N. B. Shurtleff, on twelve sculls of natives of the East Indies, Hindoos and Mussulmans, which were presented to the society by Mr Dixwell.

Mr. Tuckerman read a phrenological analysis of Dr Channing's Sermon on war, in which he stated that the Philosophy of that celebrated Divine and the doctrines of phrenology were based on the same fundamental principles of the mind.

Mr. Fowle read from the Paris Phrenological Journal, an interesting account of the post mortem examination of the head of Cuvier.

March 6.--Mr. Sleeper read a report from a committee who were appointed to examine into a singular case, in relation to the organ of Reverence, as manifested in the cranium of an individual, residing at Lowell.

Dr M. S. Perry read a paper on the organ of Alimentiveness, and related two remarkable cases of the development and manifestation of that organ.

April 2.--A report was made by Mr Sleeper, on a cast of the head of Asa Low, a paper manfacturer, in Vermont, whose organization presented a remarkable appearance.

A report was read by Dr Shurtleff, on the anatomical structure of the cranium of Dr Spurzhe .

A translation of an interesting paper on education, which originally appeared in the Paris Phrenological Journal, was read by Mr Clark.

April 17.--Mr Fowle read a paper, being an analysis of a pamphlet, written by M. D. Richard, of Paris, entitled 'Phrenology et Napoleon.'

A paper relating to the organ of Locality, was read by Mr Sleeper, in which he stated, that a remarkable instance was to be seen in the person of Abraham Courtney, a blind man, who frequented the streets of the city.

May 1.--A report upon the character of Asa Low, of Vermont, was read by Mr Sleeper, from a committee appointed to ascertain whether it corresponded with the former report on the cast.

A report was read by Mr Sleeper, on the cast of a scull, unknown to him, presented to the society at a previous meeting by Dr. Shurtleff. It was subsequently stated to be that of the negro, Henry Joseph.

June 5.--Mr Fowle read a report written by Mr Coxe, of Edinburgh, on a cast of the head of Whitefield. He also read an analysis of this report, in which he took occasion to compare it with one written by himself on the same cast, and with the real character of that individual. In corroboration of some sentiments expressed in his former report, he also read a letter written by Dr Stiles, of New Haven, in 1755, and addressed to Edward Wigglesworth, of Boston.

Mr Sleeper read a paper with some extracts, from an old periodical, on the character of the Prince Potempkin, of Russia.

June 19.--A report was read by Mr Sleeper, on the cast of the scull of a North American Indian, presented to the society, at the previous meeting by L. D. Chapin, of New York.

Mr Fowle read a report from a committee appointed to examine the two reports, made on the cast of the head of Henry Joseph, and the scull of that individual.

Dr John Flint read a paper on idiocy, and stated a remarkable case, which came to his knowledge, in relation to deficiency of intellectual power, in an individual.

A paper was read by Mr Sleeper, on the character of the pirates, who were executed for robbing the brig Mexican, of Salem, on the high seas.

Mr Fowle read a report relating to the scull of Delgardo, which had been reported on at a previous meeting, detailing various circumstances, illustrative of the character of that individual.

July 17.--A report was read by Mr Sleeper, from a Committee appointed at the previous meeting, to compare the contents of a letter received from the South Reading Society, relating to a scull sent some time before to be examined, with a report made by a committee of this society, on said scull, which proved to be that of J. P. Rog, who was executed in this city, a number of years ago, for piracy.

Mr Sleeper read a report of a committee appointed to examine a cast of the head of a person unknown to the committee, which was handed in to the society at the previous meeting.

After which, Dr. Fox read a statement relating to the character of the individual, from whose head the above cast was taken, and who proved to be Mr S. Willard, well known as a clock manufacturer.

Mr. Bugard read a report from cast 169, being one of the phrenological specimens, received by the society, from Europe.

September 4.--Mr Frothingham read a paper explaining the functions and locality of a new organ, which he denominated Associativeness, supposed to be situated between Self-Esteem and Concentrativeness.

Mr Fowle read a paper relating to an interesting case of practical phrenology.

Sept. 18.--A report was read by Mr Fowle, on the merits of a former report on the cast of the head of Mr Simon Willard, and confirming the character deduced from an examination of the developments of the organs, as stated in the report of Mr Sleeper, with the known character of the individual.

Oct. 2.--A report was read by Mr Fowle, on Dr Antommarchi's mask of Napoleon.

Mr Frothingham read a report, relating to a report previously made to the society, on a cast of an Indian scull, and also on several sculls which were committed to him, in which he entered largely into the subject of the character of the North American Indian.

Mr Sleeper read a report on a scull, which was referred to a committee at the previous meeting, which, it afterwards appeared by a statement of Mr Bugard, who presented the scull to the society, was found in a mound or Indian burying-ground in Georgia--where it has probably been buried for centuries.

A paper was read by Dr John Flint, relating to the cure of a diseased organ of Amativeness, and a post mortem examination of the individual.

Oct. 16.--Mr Sleeper read a report on the cast of the bust of an individual, unknown to him, which was presented to the society at the previous meeting, by Mr Fowle, and which subsequently proved to be a cast of the head of the late Dr Benjamin Rush, of Philadelphia.

Dr Flagg read an interesting case, from the London Lancet, relating to Mary Murdoch, who with Wade, her accomplice, was executed near Bristol, Eng. for poisoning Mary Smith.

Mr Frothingham read a paper, in relation to an organ which he supposed to exist, and which he styled Watchfulness--located over the ear, between Caution and Acquisitiveness.

Nov. 6.--Mr Sleeper read a report on a cast of the upper part of a cranium, of extraordinary organization, which had been sent to the society, by Baron Pisani, of Palermo, in Sicily.

Mr Frothingham read a paper, being a final report on the Indian sculls, presented to the society by Dr Powell, of New Orleans.

Nov. 20.--Dr John Flint read a report from a committee appointed to visit the boys' school, connected with the House of Industry, at South Boston, and stated the developments and probable characters of several of the lads in that institution.

Mr Fowle read a report, relating to a report previously made to the society, on the cast of the head of Dr Rush, of Philadelphia.

Mr Frothingham read a report on the cast of Mark Winslow, a notorious counterfeiter, who committed suicide, in Leverett-street gaol.

Mr Sleeper read a report from a committee appointed to ascertain the correct character of Mark Winslow.

Dec. 19.--Mr Fowle read a paper relating to the opinions of the Edinburgh and London phrenologists on the cast of the scull of Whitefield, which had been sent to each of these societies.

Mr Frothingham read a paper, describing more fully and particularly the functions of the new organ of Associativeness.

A paper was read by Mr Sleeper, descriptive of a visit lately made to the State Prison, at Charlestown, and an examination of the heads of several of the convicts.

In addition to the reports and papers which have been communicated, a number of letters have been received from abroad, and read to the society; and a great number of verbal communications have been made by various members, on interesting subjects connected with Phrenology. A number of reports have also been made on matters of business, which are not included in the above list, and several animated discussions have taken place among the members, at the meetings, on questions proposed for debate by the Executive Committee. We trust and believe that it will be seen from the above, that the members of this Society have not been idle during the past year; and now, having succeeded, although at a great expense, in procuring a catalogue of the phrenological specimens obtained more than a year since from England, it is but fair to presume that the proceedings of the society for the present year will be of a character more interesting than the last. It is hoped that every member of the society will not content himself with attempting to gain instruction, but will voluntarily communicate all the information which he may from time to time obtain, which may prove interesting or instructive to those who are pursuing the study of the science of Phrenology.

J. S. Sleeper, Rec. Secretary

SOURCE: Annals of Phrenology 2 (1835):501-506.

BIOGRAPHICAL DATA

Name in Full: Anthony Albert Walsh

Date of Birth: 26 November 1940

Place of Birth: Worcester, Massachusetts

Secondary Education: Shrewsbury, Massachusetts Junior-Senior High School

Collegiate Institutions Attended:

Worcester Junior College	1959-1961	A.A.
American International College	1962-1964	B.A.
Springfield College	1964-1966	M.S.
University of New Hampshire	1970-1974	Ph.D.

Honors or Awards:

Psi Chi
Sigma Xi
Certificate of Advanced Study, Springfield College
Rehabilitation Counseling Traineeship, 1964-1966.

Publications:

Walsh, A. A. "A Note on the Origin of Modern Spiritualism." J. Hist. Med. All. Sci. 28 (April, 1973):167-171.

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_____. "The American Tour of Dr. Spurzheim." J. Hist. Med. All. Sci. 27 (1972):187-205.

Grosser, G. S. and Walsh, A. A. "Sex Differences in the Differential Recall of Taboo and Neutral Words." J. Psychol. 63 (1966):219-227.

Positions Held:

Assistant Professor of Psychology, Dickinson College, Carlisle, Pennsylvania, July, 1973-Present.

Instructor, in Psychology, Part-time, Department of Psychology, University of New Hampshire, September, 1972-June, 1973.

Graduate Associate, Department of Psychology, University of New Hampshire, September, 1971-June, 1972.

Instructor in Psychology, Department of Psychology, University of New Hampshire, September, 1968-August, 1971.

Instructor in Psychology and Counselor in the College Counseling Center, Mitchell College, New London, Connecticut, June, 1966-August, 1968.

Intern in Clinical and Counseling Psychology, Belchertown State School (for the Retarded), Belchertown, Massachusetts, March-June 1966.

Psychometrist and Evaluation Interviewer for the First National Job Corps Staff Training Sessions and Conference, Springfield College, Summer, 1965.

Field Interviewer, Connecticut Association for Retarded Children, Inc., High Street, Hartford, Connecticut, January-June, 1965.

Graduate teaching assistant, Department of Psychology, Springfield College, September, 1964-June, 1966.